UNITED STATES DEPARTMENT OF LABOR
UNITED STATES EMPLOYMENT SERVICE

YOUTH AND EMPLOYMENT OPPORTUNITIES IN FRANKLIN COUNTY, MISSOURI

A Study of Industrial and Agricultural Trends in Relation to the Demand for Labor in a Rural County Adjacent to the St. Louis Industrial Area

(Preliminary)

Prepared by Division of Standards and Research

Dreng Bjornaraa, Local Director

Community Survey Center, 922 New Federal Building
St. Louis, Missouri, April 1939

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FOREWORD

The Division of Standards and Research of the United States Employment Service in cooperation with the American Youth Commission is operating four community survey centers, located in Baltimore, Providence, St. Louis, and Dallas. These centers are charged with a dual responsibility, first, to provide state employment services with specific information of local application, and second, to develop methods and procedures which can be applied to the solution of similar problems in comparable areas. The studies fall into four general categories: Job analysis, worker analysis, economic analysis, and procedures analysis. The work of the job analysis section is directed toward an exact description of the activities of the worker in the performance of the duties of his job. The worker analysis section is developing information to describe the qualifications the worker must possess to perform satisfactorily the duties of various jobs. To analyze the demand for and the supply of labor for specific jobs is the objective of the economic analysis section. The facts assembled by these three sections have greatest value when used most effectively. As part of its work the procedures analysis section develops the methods for employment office use of the data prepared by the other three sections.

The American Youth Commission has identified the problems of rural youth to be distinct from those of other special groups and to require particular analysis. This study was designed to determine the employment opportunities for rural youth in a county adjacent to the St. Louis Industrial Area. A similar analysis has been prepared for St. Charles County.

It must not be assumed that this study reveals a situation typical of other counties adjacent to large industrial areas. Franklin County's problems are peculiar to itself. Data for other areas must be collected locally.

The field work was completed during September and October 1938. During these months school administrators and farmers were available for interviews and the shoe factories and other industries were in operation which facilitated the collection of local data.

It was found that the youth of Franklin County views his future employment possibilities with apprehension, indifference, or eagerness depending upon his temperament and his knowledge of his opportunities. For a fortunate few

who will inherit a profitable farm and who have the capacities and interests which make for success in agriculture, the future is bright. For many others, vocational adjustment will present a difficult problem. Increasing mechanization of agricultural processes and declining fertility of the soil are reducing the demand for labor in farm occupations. Local industries provide but limited employment possibilities. Therefore, many Franklin County youth will be forced to migrate to the St. Louis Industrial Area in search of employment. But labor surpluses are to be found there in most occupations. What then, are the employment opportunities for youth of Franklin County? What will they probably be in the future? To what extent do past trends in population, employment, unemployment, and migration throw light upon future possibilities?(1) How may the Missouri State Employment Service provide information and guidance for youth in the selection of a vocation and subsequent employment?

The scope of this brief study will permit only tentative answers to some of these questions. But it is hoped that it will serve to isolate the problems and to suggest steps to be taken by the Employment Service so that it may increase its usefulness to the local community.

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(1) The St. Louis Community Survey Center has in process a study of the eighth grade graduates, classes of 1929, 1931, and 1933, of public and private schools in Franklin and St. Charles Counties. This study is being carried out by means of a questionnaire and will suggest, as a part of its data, the extent to which the young people selected, obtain jobs in St. Louis. The methods used by the youth of these counties to secure employment will be disclosed and through the cooperation of the Works Progress Administration, in connection with a local project, Survey of Youth in the Labor Market, employment interviews will be conducted with those now employed in St. Louis.

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We wish to express our indebtedness for information and suggestions made during the course of our field study by the following residents and individuals associated with various activities in Franklin County. Floyd S. Ingersoll, County Agricultural Extension Agent, Union, Missouri; Homer A. Hill, County Rural Rehabilitation Supervisor, Farm Security Administration, Union, Missouri; H. L. McAtee, Missouri State Employment Service, City Hall, Washington, Missouri; Mrs. Lena M. Hasty, formerly Junior Interviewer, Missouri State Employment Service, Washington, Missouri; O. E. Burke, County Superintendent of Schools, Union, Missouri; Rowena Bass, County Secretary, Local Board, Social Security Commission, Union, Missouri; Elmer W. Junge, City Clerk, St. Clair, Missouri; M. B. Lane, Postmaster, Sullivan, Missouri.

James A. Neher, President, Union Chamber of Commerce, Union, Missouri; L. J. Mintrup, Cashier, United Bank, Union, Missouri; Herman F. Hansen, Local Director, St. Louis Regional Planning Commission, Union, Missouri; J. J. Jennings, Superintendent, Hambro shoe plant of Collins-Morris Company, Union, Missouri; C. W. Fisher, Chief Clerk, St. Clair Factory, International Shoe Company, St. Clair, Missouri; M. W. Stahlman, Cashier, Farmers and Merchants Bank, St. Clair, Missouri; Frank Hall, St. Clair, Missouri; O. H. Grannemann, Washington, Missouri.

O. E. Burke, County Superintendent of Schools, Union, Missouri; Charles A. Cole, Superintendent, Washington Schools, Washington, Missouri; Don Mathews, Superintendent, Sullivan Schools, Sullivan, Missouri; R. J. Dickson, Superintendent, St. Clair Schools, St. Clair, Missouri; William Harry Justice, Superintendent, Pacific Schools, Pacific, Missouri; Clyde E. Rinehart, Superintendent, New Haven Schools, New Haven, Missouri; Leo E. Mize, Principal, Washington Schools, Washington, Missouri.

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R. G. Gardner, Financial Secretary, Boot and Shoe Workers', Local Union No. 176; Oscar Danz, Chairman, Boot and Shoe Workers', Local Union No. 176; Hadley Lewis, Member of Executive Committee, United Shoe Workers', Local No. 125; George Carey, Organizer, Boot and Shoe Workers' International, St. Louis, Missouri; J. W. McGonigal, Organizer, Boot and Shoe Workers' International, Moberly, Missouri.

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I. INTRODUCTION

Franklin County in 1930 had a population of 30,519. It was the fourth largest county in the State of Missouri, covering an area of approximately 880 square miles. The density of the population was 34.7 persons per square mile, in contrast to 52.8 persons per square mile for the state.(1) When the population of St. Louis and Kansas City was removed from the state totals this figure became 35.09 persons per square mile, which showed that Franklin County possessed about average density of population for counties outside metropolitan areas.

The eastern edge of Franklin County lies about 26 miles west of St. Louis.(2) The county seat, Union, is approximately 50 miles west and a little south of the city. Because of its proximity, Franklin County is closely linked to the economic and social life of the St. Louis Industrial Area.

The county is characterized along its northern border by a stretch of fertile bottomlands, created by the Missouri River. The surface rises abruptly from an altitude of 500 feet to about 1,000 feet along these narrow river bottomlands.(3) The upland area continues to the southern edge of the county. This area is rolling, hilly country which contains a few flat prairie areas.

The bottomland soil is highly productive but it comprises only about 10 percent of the county's area. It grows excellent crops of corn, wheat, clover and grass, but a large part is subject to periodic overflow.

Of the upland soil, only about 5 percent is highly productive. It lies in a strip one to two miles wide which is composed of very rolling land bordering the bluffs along the Missouri River. Under careful management it will grow good crops of wheat, barley, alfalfa and grass, but cultivated crops like corn cause heavy soil loss through erosion and "soil mining". Poor farm management has led to rapid

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(1) Official Manual, State of Missouri, 1937 to 1938, Jefferson City, 1938, p. 220.

(2) St. Louis Regional Planning Commission. Planning Progress in the St. Louis Region, St. Louis, 1937, p. 1.

(3) United States Department of Agriculture, Bureau of Soils, Soil Survey of Franklin County by E. S. Vanatta and H. G. Lewis, 1911, pp. 1603 to 1633.

deterioration of much of this potentially productive area.

The remaining upland area which comprises about 85 percent of the entire county surface is of medium to poor fertility. With proper treatment this soil will produce fair crops of wheat, barley, oats, Korean Lespedeza, corn and grass.

Much of the upland area has lost at least 50 percent of its original top soil through erosion.(4) Some 20 to 40 percent of this land is used for small grain and hay, 10 to 30 percent for open pasture, but corn acreage, due to erosion, is limited today to about 10 percent of the land. The growing of grain crops without the replenishing of essential plant food has mined the soil of its fertility until now much of the land is suitable only for timber growing.

Approximately two-thirds of the upland soil was once covered by timber.(5) Now only about one-third is so covered. The declining productivity of the farm land has led gradually to a shift from grain farming to livestock and dairy farming.

The county's average rainfall of about 40 inches is well distributed through the growing season which usually covers about 194 days between the last frost in spring and the first frost in fall. The average annual temperature is about 67 degrees and the high altitude, rolling topography, and excellent water supply make this county a healthful place in which to live.(6)

As the agricultural production declined after 1900, the county was confronted with a large population surplus. The situation tended to adjust itself through two developments:

(1) Migration out of the county took place on a large scale.

(2) St. Louis shoe companies migrated into the

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(4) Soil Erosion in Missouri, by T. D. Baver, University of Missouri, College of Agriculture, Agricultural Experiment Station, Bulletin 349, 1935, p. 58.

(5) United States Department of Agriculture, loc. cit.

(6) United States Department of Agriculture, Weather Bureau, Climatic Summary of the United States, Section 55, Southeastern Missouri, 1935, pp. 1 to 14.

county after 1910 to take advantage of the surplus labor. Shoe factories are now located in four of the rural towns in the county and supply the chief industrial employment. They have experienced a consistent growth up to the present time.

II. THE SUPPLY OF LABOR

A. Population Trends

Since 1910 a large proportion of the rural counties in Missouri have been losing population. During the decade from 1910 to 1920, 89 counties, or 78 percent, showed decreases in population. From 1920 to 1930, 82.5 percent of the counties lost population.

During the years 1910 to 1920, Franklin County was among those counties losing population. It experienced a decrease of 4.7 percent. In the following decade, however, the population increased 7.4 percent. This latter trend was opposite to that of most Missouri counties.

1. The Rural Population. In Franklin County the rural population declined steadily after 1900, as shown in the following table:

TABLE 1. - RURAL POPULATION FRANKLIN COUNTY, MISSOURI, 1900 TO 1930(1)

Year	Rural population
1930	24,601
1920	25,295
1910	26,160
1900	27,566

(1) Data for 1930 and 1920 from the Fifteenth Census of the United States, 1930, Population, Vol. III, Pt. I, p. 1341; data for 1910 and 1900 from the Fourteenth Census of the United States, 1920, Population, Vol. I, p. 163.

The rate of decrease in the rural population, however, has slowed up slightly during the past two decades, as shown in table 2.

TABLE 2. - PERCENT CHANGE IN RURAL POPULATION, FRANKLIN COUNTY, MISSOURI, 1900 TO 1930(1)

Year	Percent change in rural population
1920-1930	- 2.7
1910-1920	- 3.3
1900-1910	- 5.1

(1) Loc. cit.

The urban population increased from 1900 to 1910 but showed a very marked decrease from 1910 to 1920. An abrupt change occurred, however, after 1920, as shown by the following figures:

TABLE 3. - URBAN POPULATION FRANKLIN COUNTY, MISSOURI, 1900 TO 1930(1)

Year	Urban population
1930	5,918
1920	3,132
1910	3,670
1900	3,015

(1) Loc. cit.

The percent of change 1900 to 1930 is shown in table 4. The urban population numbered 3,015 in 1920 and 5,918 in 1930, an increase of 89 percent. The urban population of Franklin County as defined by the federal census is made up entirely of people in the City of Washington. An analysis of the growth of the rural towns in the county will disclose some interesting trends in population changes.

2. Growth of Small Factory Towns. It has been stated that the population of Franklin County increased ap-

TABLE 4. - PERCENT CHANGE IN URBAN POPULATION, FRANKLIN COUNTY, MISSOURI, 1900 TO 1930(1)

Year	Percent change in urban population
1920-1930	+ 89.0
1910-1920	- 14.7
1900-1910	+ 21.7

(1) Loc. cit.

proximately 4.7 percent from 1920 to 1930. This is in contrast to a decline during the previous decade. The sudden upward trend in population was identified with the growth of a few factory towns. This may be seen clearly in accompanying table 5. It reveals that although "Other rural population" declined with increasing rapidity up to 1930, a few of the towns had very rapid increases in population. St. Clair, for example, which increased only 11 percent from 1910 to 1920, increased 156 percent from 1920 to 1930. The town of Sullivan experienced a similar growth. So rapid was the growth of these few factory towns that it was sufficient to offset the decline of "Other rural population" and to give the county, as a whole, an increase in population from 1920 to 1930.

3. Composition of the Population. The population of Franklin County consists almost entirely of native whites, the latter constituting 92 percent in 1920; and 96 percent in 1930. The composition by color and nativity for 1930 and 1920 is shown in table 6. Franklin County does not present any particular racial problems. There are no large Negro or foreign-born elements in the population. The population by age, color, nativity, and sex is shown in table 7.

B. Migration(7)

1. 1910 to 1920. There were 6,657 native whites 0 to 9 years of age in Franklin County in 1910. By 1920, it

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(7) This discussion has been confined to the native white

TABLE 5. - POPULATION TRENDS BY SELECTED AREAS, FRANKLIN COUNTY, MISSOURI,1910 TO 1930(1)

Area	1910	1920	1930	Percent gain or loss		
				1910-1920	1920-1930	1910-1930
Franklin County	29,830	28,427	30,519	- 4.7	+ 7.3	+ 2.3
All towns	8,581	8,736	14,344	+ 1.8	+ 64.2	+ 67.2
Washington (urban)	3,670	3,132	5,918	-14.7	+ 89.0	(3) + 61.3
Union	934	1,605	2,143	+71.8	+ 33.5	(3) +129.4
Sullivan	934	909	2,013	- 2.7	+121.5	(3) +115.5
Pacific	1,418	1,275	1,456	-10.1	+ 14.2	+ 2.7
St. Clair	397	442	1,135	+11.3	+156.8	(3) +185.9
New Haven	855	805	876	- 5.8	+ 8.8	+ 2.5
Gerald	225	246	344	+ 9.3	+ 39.8	+ 52.9
Berger			(2)231			
Moselle	148	160	125	+ 8.1	- 21.9	- 15.5
Leslie		162	103		- 36.4	
Other rural pop.	21,249	19,691	16,175	- 7.3	- 17.8	- 23.9

(1) The Fifteenth Census of the United States, 1930, Population, Vol. I, p. 609.
(2) Incorporated in 1928.
(3) Towns with shoe factories.

is estimated that 10.9 percent had emigrated. Of these, 297 were estimated to be males and 431, females. These data are shown by sex in table 8.

2. <u>1920 to 1930</u>. An estimate of migration for the native white population 10 to 19 years of age in 1920 indicates that by 1930, when they had become 20 to 29 years of age, 1,030 had mi-

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population because the proportion of foreign born white and Negroes in Franklin County in 1930 was so small as to be almost insignificant, 2.4 percent and 1.0 percent, respectively, while for the United States these figures were 11.6 percent foreign born white and 9.7 percent Negro. An attempt to estimate migration by nativity and color would lead to error because the composition of the population of Franklin County was different from that of the United States as a whole.

TABLE 6. - COMPOSITION OF THE POPULATION IN FRANKLIN COUNTY, MISSOURI, 1930, WITH PERTINENT DATA FOR 1920(1)

	1930	1920
Total population	30,519	28,427
Male	15,736	
Female	14,783	
Native white	29,217	26,263
Male	15,045	
Female	14,172	
Native parentage	23,591	
Foreign parentage	3,066	
Mixed parentage	2,560	
Foreign born white	734	1,202
Male	389	
Female	345	
Negro	567	961
Male	301	
Female	266	
Other races	1	
Percent native white	95.7	92.4
Percent foreign born white	2.4	4.2
Percent Negro	1.9	3.4

(1) Data for 1930 and 1920 from the Fifteenth Census of the United States, 1930, Population, Vol. III, Pt. I, p. 1341.

grated. Males accounted for 496 of the estimated number, and females 534. These data are shown in table 9.

Those native whites who were less than 10 years of age in 1910 had become 10 to 19 years of age in 1920. By 1930 they were 20 to 29 years of age. Tables 8 and 9 show estimates which indicate that migration of these persons proceded

TABLE 7. - POPULATION BY AGE, COLOR, NATIVITY, AND SEX, FRANKLIN COUNTY, MISSOURI, 1930(1)

Age (years)	All classes			Native white		Foreign-born white		Negro	
	Total	Male	Female	Male	Female	Male	Female	Male	Female
All ages	30,519	15,736	14,783	15,045	14,172	389	345	301	266
Under 5	2,794	1,395	1,399	1,374	1,370	-	-	21	29
Under 1	519	254	265	249	261	-	-	5	4
5 to 9	3,013	1,522	1,491	1,487	1,459	-	1	35	31
10 to 14	3,034	1,564	1,470	1,531	1,446	-	-	32	24
15 to 19	3,031	1,571	1,460	1,533	1,431	-	2	38	27
20 to 24	2,479	1,253	1,226	1,226	1,202	4	5	23	19
25 to 29	2,143	1,119	1,024	1,089	999	12	6	18	19
30 to 34	1,947	1,011	936	985	904	5	15	21	17
35 to 44	3,761	1,893	1,868	1,835	1,820	29	23	29	25
45 to 54	3,372	1,739	1,633	1,636	1,545	71	55	32	33
55 to 64	2,584	1,367	1,217	1,262	1,111	79	87	26	19
65 to 74	1,700	944	756	825	678	105	67	14	11
75 and over	658	356	302	260	260	84	84	12	12
Unknown	3	2	1	2	1	-	-	-	-

(1) Fifteenth Census of the United States, 1930, Population, Vol. III, Pt. I, p. 1330.

at a more rapid rate between 1920 and 1930 than it had during the previous decade.

It is estimated that 103 native whites 10 to 19 years of age were leaving Franklin County each year from 1920 to 1930. Of these, 50 were estimated to be males and 53, females. This means that if the employment office wishes to assist these young migrants to make more intelligent changes in their economic environment it must accept the fact that it will probably deal with more females than males. This tendency for more females to migrate is substantiated not only by these estimates but also by the composition of the population.

TABLE 8. - ESTIMATES OF MIGRATION FOR NATIVE WHITE POPULATION UNDER 10 YEARS OF AGE BY SEX, FRANKLIN COUNTY, MISSOURI, 1910 TO 1920(1)

Sex	Population 0 to 9 years 1910	Estimated loss due to migration, 1910 to 1920	
		Percent	Number
Both sexes	6,657	10.9	728
Males	3,378	8.8	297
Females	3,279	13.1	431

(1) For a detailed analysis of migration of the native white population see Appendix, 1.

TABLE 9. - ESTIMATES OF MIGRATION FOR NATIVE WHITE POPULATION 10 TO 19 YEARS OF AGE BY SEX, FRANKLIN COUNTY, MISSOURI, 1920 TO 1930(1)

Sex	Population 10 to 19 years 1920	Estimated loss due to migration, 1920 to 1930	
		Percent	Number
Both sexes	5,705	18.1	1030
Males	2,939	16.9	496
Females	2,766	19.3	534

(1) For a detailed analysis of migration of the native white population see Appendix, 1. This table shows that 5,705 persons were 10 to 19 years of age in 1920. Reference to Note 1 in the Appendix indicates that by 1930 this group had decreased to 4,516 (the number of persons 20 to 29 in 1930). This represents a loss of 1,189. Subtracting 1,030, the number of persons estimated as migrating between 1920 and 1930, leaves a remainder of 159. This remainder is approximately the expected loss by deaths during the decade.

TABLE 10. - NUMBER OF MALES PER 100 FEMALES IN THE URBAN AND RURAL AND WHITE AND NATIVE WHITE POPULATION FOR SELECTED AREAS, 1930

Area and nativity	Number of males per 100 females				
	All classes	Urban	Rural	Rural farm	Rural non-farm
United States(1)	102.5	98.1	108.3	111.0	105.0
White	102.7	98.4	109.0	112.7	104.7
Native white	101.1	96.0	107.6	111.6	102.9
Missouri(1)	100.9	95.0	107.5	111.8	100.6
White	100.9	94.7	107.3	111.7	100.2
Native white	100.1	93.2	106.9	111.3	99.7
St. Louis City(2)	95.6	95.6	-	-	-
White	95.4	95.4	-	-	-
Native white	93.1	93.1	-	-	-
Franklin County(2)	106.4	97.3	108.8	118.5	97.6
White	106.3	-	-	-	-
Native white	106.2	-	-	-	-

(1) Fifteenth Census of the United States, 1930, Population, Vol. II, Chap. 3.

(2) Calculated from tables in the Fifteenth Census of the United States, 1930, Population, Vol. III, Pt. I, pp. 1317 to 1389. Data by nativity for the urban and rural population are not available for Franklin County.

C. Ratio of Males to Females

In 1930 there were 15,045 males and 14,172 female native whites in Franklin County. This was in contrast to St. Louis which in 1930 had 311,749 males and 334,744 native white females. It is interesting to compare the ratio of males and females in Franklin County with other significant areas.(8)

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(8) See table 10.

For Franklin County as a whole in 1930 there were 106.4 males to every 100 females while for the United States this figure was 102.5 and for the State of Missouri, 100.0. In the urban population of Franklin County there were 97.3 males to every 100 females. For the United States, native white population, this figure was 98.0 and for the State of Missouri, 98.2. In Franklin County, rural population, there were 108.8 males to 100 females. For the United States, rural population native white, the number of males per 100 females was 107.6 and for the State of Missouri 106.9. These ratios indicate that the rural population of Franklin County had approximately the same sex ratio as the larger areas of which it was a part. For the rural farm population, however, in Franklin County there were more males per 100 females in the native white population than for the United States or for the State of Missouri. These ratios were respectively 118.5, 111.6, and 111.3. This excess of males to females in the rural farm population of Franklin County was probably the result of its proximity to St. Louis which attracted females to migrate in search of economic opportunities which were lacking on the farm and in small, rural, non-farm communities.

In the rural, non-farm population of Franklin County there were only 97.6 males to every 100 females. This ratio may be compared with 102.9 for the United States, native white population, and 99.7 for the State of Missouri. These ratios indicate that there were fewer males per 100 females in Franklin County and in Missouri than in the United States, when only the rural non-farm population is considered. This is probably a result of the fact that young women from farms seek opportunities in manufacturing and service industries in small towns in the county.

In short, these sex ratios seem to indicate successive waves of migration beginning from the rural farm areas to the rural towns, and from the rural towns to the urban towns, and to the St. Louis metropolitan district. For the United States, for the State of Missouri, and for Franklin County increasing concentration of population decreased the ratio of males to females and further substantiated our data which showed the greater migration of females from rural to urban centers.

D. Estimates of Change in Population 1930 to 1937

There is some evidence to indicate that the birth rate has declined since 1930 in Franklin County. Social workers reported a noticeable reduction in the size of fami-

lies. The county superintendent of schools stated that the enrollment in the first few grades had fallen off even though the population increased during the decade from 1920 to 1930. The Appendix, 2, and associated tables, show the estimated net change in population. Based upon the assumption that trends of a greater geographic area have influenced Franklin County according to its relationship to the larger population, these estimates indicate a net increase of 183 persons in the total population of the county during the period from 1930 to 1937.

Vital statistics for Franklin County are not indicative of local birth and death rates because a large number of children of Franklin County residents are born in hospitals in the City of St. Louis and many residents die in hospitals outside the county.

These estimates suggest that Franklin County is approaching a stable population. However, the birth rate although declining will probably continue to be greater for some years to come than that required for replacement.

Migration, therefore, will likely continue until the declining birth rate reduces the population to a level with economic opportunities. Even then, although employment be available for everyone, migration probably will continue because part of the population believes, wisely or not, that there are greater employment opportunities elsewhere. The volume of migration possibly will be slightly less in the future.

Franklin County's migrating young workers, who can meet employer's hiring standards will have an opportunity to obtain employment in the industrial area of St. Louis because St. Louis, like other large cities, is not replacing itself by an excess of births over deaths.

E. Unemployment

1. Amount. The amount of unemployment in Franklin County may be studied from three sources:

(a) Fifteenth Census of the United States, 1930, Unemployment, Vol. I.

(b) Census of Partial Employment, Unemployment, and Occupations, 1937.

(c) Missouri State Employment Service active file at Washington, Missouri.

(a) Fifteenth Census of the United States, 1930, Unemployment, Vol. I. The Unemployment Census of 1930 has been criticized on the ground that the technique of enumeration under-stated the country's unemployment problem. It is possible, therefore, that this census does not present an accurate picture of the unemployment problem of Franklin County. With these facts in mind, the data shows the percentage of unemployed gainful workers to all gainful workers to be as follows:

Total number of gainful workers, 1930	(9)11,569
Total number of unemployed gainful workers, 1930	(10)286
Percent gainful workers unemployed, 1930	2.5

These figures would indicate that in 1930 the unemployment problem was not serious in Franklin County. Even if the enumerated figure should be doubled to allow for under-enumeration, it would still remain relatively small. It should be remembered, however, that less than 20 percent of the county's population is urban. Most of the unemployment was probably registered among this 20 percent which would make the percentage of gainful workers unemployed in this group very much larger than for the county as a whole.

(b) Census of Partial Employment, Unemployment, and Occupations, 1937. Table 11 presents estimates of population, number of gainful workers, and unemployment in Franklin County in 1937.

From this table we may compare the number of gainful workers in 1937, secured by revised estimates, with the estimated number of unemployed and emergency workers from the Census of Unemployment, when corrected for under-enumeration.

This comparison indicates that unemployment in 1937 had increased to the extent that 18 percent of the gainful workers in Franklin County, were either totally unemployed or working on the emergency program where they were available for employment in private industry. To this group may be added those who were partially unemployed, with the result that 26.2 percent of the gainful workers in Franklin County were totally unemployed, emergency workers, or partly unemployed, in November 1937. In other words, there were over 3,000 persons in the county by 1937 who were in need of full- or part-time employment.

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(9) See table 11.
(10) See table 13.

TABLE 11. - ESTIMATES OF POPULATION, NUMBER OF GAINFUL WORKERS, AND UNEMPLOYMENT, FRANKLIN COUNTY, MISSOURI, 1937(1)

Item	Total	Male	Female
Population, 1930	30,519	15,736	14,783
Estimated population, 1937	30,702	15,735	14,967
Gainful workers, 1930 (less unpaid family workers in agriculture)	11,569	9,395	2,174
Estimated number of gainful workers, 1937, based upon 1930 percentages	11,594	9,394	2,200
Revised estimate of the number of gainful workers, 1937	12,173	9,415	2,758
Estimated number of totally unemployed and emergency workers, 1937, corrected for possible incompleteness of coverage	2,190	1,591	599
Estimated number of partly unemployed 1937	995	809	186
Estimated number of totally unemployed, emergency workers, and partly unemployed, 1937	3,185	2,400	785
Estimated number of totally unemployed and emergency workers as a percentage of the revised estimate of the number of gainful workers, 1937	18.0	16.9	21.7
Estimated number of totally unemployed, emergency workers, and partly unemployed as a percentage of the revised estimate of the number of gainful workers, 1937	26.2	25.5	28.5

(1) For methods and sources used for determining these figures see Appendix, 2 to 4.

(c) Missouri State Employment Service Active File at Washington, Missouri. The active file of the employment office at Washington, Missouri contained 1,351 applicants at

the time of the inventory, November 1937.(11) Of these applicants, 1,314 were males and 37, females. If we assume a total of 12,173 gainful workers in 1937, this would indicate a registration of 11.1 percent of all gainful workers in the county, or 13.9 percent of 9,415 the estimated number of male gainful workers. This figure is 82.6 percent of the male estimated totally unemployed and emergency workers from the Census of Unemployment taken at the same time. When both sexes are considered the active file contained 61.7 percent of the estimated number of totally unemployed and emergency workers. The number of active file registrants at the employment office would be expected to be less than the actual number of unemployed persons in the county because of the failure of some of the unemployed to register and of those registered, because of their failure to make frequent contacts with the office to maintain the active status of their applications. Data on a national basis show that only 38 percent of the number of totally unemployed or emergency workers indicated by the enumerative check of the Census of Partial Employment, Unemployment, and Occupations, 1937, was included in the active file of the state services affiliated with the United States Employment Service.(12) One reason for the greater completeness of employment service registration in Franklin County than for the nation as a whole, may be found in the occupational distribution of the male active file, where 77.3 percent of the applicants were classified as laborers and carpenters.(13) These occupations, together with most of those shown in table 18, were the kind demanded by the federal work projects in the county. These projects included the construction of a toll bridge, schools, water works improvements, etc. The majority of rural farm residents and many rural non-farm workers can qualify for work of this kind. Farmers register for work on these projects in the endeavor to secure ready cash while farm work is slack.

2. Distribution by Sex. Table 13 presents statistics which permit the comparison by sex of unemployment in 1930 with 1937. It will be seen that in 1930 females accounted for 18.8 percent of the gainful workers but for only 15.0 percent of the unemployed in Classes "A" and "B". By 1937 the proportion of females who had entered the labor market had increased, for reasons described in the Appendix, 3, in that they constituted 22.7 percent of the estimated number of gainful workers. The unemployment of women had increased faster than their employment so that they made up 27.4 percent of the estimated number of totally unemployed and emergency workers.

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(11) See table 12.

(12) Can Employment Service Reports be Used to Measure Unemployment? Part 2, by E. D. Hollander and E. D. Vinogradoff, Monthly Labor Review, Vol. 47, No. 1, July 1938, pp. 156 to 163.

(13) See table 12.

TABLE 12. - APPLICATIONS IN ACTIVE FILE BY SEX AND OCCUPATION, MISSOURI STATE EMPLOYMENT SERVICE OFFICE, FRANKLIN COUNTY, MISSOURI, NOVEMBER 1937(1)

Male				Female	
Occupation	Number	Percent	Cumulative percent	Occupation	Number
Total applications	1314	100.0		Total applications	37
Laborers, agriculture	610	46.5	46.5	Stenographers, general	7
Laborers, construction	181	13.8	60.3	Laborers, factory	7
Laborers, factory	141	10.7	71.0	Teachers, grade school	5
Laborers, railroad	26	2.0	73.0	Housekeepers, home	5
Carpenters, finish	24	1.8	74.8	Clerks, general office	3
Laborers, surface mining	18	1.4	76.2	Dayworkers, general	2
Carpenters, form	16	1.2	77.4	Seamstresses	2
Auto mechanics	16	1.2	78.6	All other occupations	6
Mat weavers, river	16	1.2	79.8		
Wire weavers	15	1.1	80.9		
Truck drivers, over 3 tons	15	1.1	82.0		
Truck drivers, 1½ tons or less	15	1.1	83.1		
Farmers	14	1.1	84.2		
Stationary firemen	14	1.1	85.3		
Airhammer operators	14	1.1	86.4		
Truck drivers, dump	12	0.9	87.3		
All other occupations	167	12.7	100.0		

(1) From official tabulation sheets, Office of the Director, Missouri State Employment Service, Jefferson City, Missouri. Analysis as of October 1938 by H. L. McAtee, Interviewer, Franklin County Office, showed much the same distribution.

It is interesting to note the sex distribution of applications in the active file of the Missouri State Employment Office. Only 2.7 percent are those of women. The reason for this under-representation of women is probably due to the fact that in a small area like Franklin County, workers are familiar with employment opportunities within the area. Since employment upon a federal work project takes place only after

registration in the employment office, workers who desire project employment register there. The projects in Franklin County were for the most part those requiring male workers. Since no opportunities were offered for women, women did not register.

3. Distribution by Age Group. Table 14 presents the applications in the active file of the employment office by age group, sex, and percentage distribution for Franklin County as of November 1937. Table 15 gives the same data for the estimated number of totally unemployed and emergency workers from the Census of Partial Employment, Unemployment, and Occupations, 1937. Since the number of female registrants in the employment office is less than 3 percent of the total, any conclusions drawn from these tables had best be based upon an examination of the figures for males. It will be seen that the employment office registrations are concentrated in the most employable age groups, i.e. from 20 to 64, and that the data from the Census of Unemployment includes a greater proportion of persons in the age groups 15 to 19 and 65 to 74. The fact that workers in the more employable age groups are registered in the employment office is probably due to the fact that persons 15 to 19 years of age who considered themselves unemployed for purposes of the Census of Unemployment, felt that their chances of securing a job were so remote that they failed to register at the employment office. When age groups 20 to 74 are considered, it is found that the percentages of applications in the active file and estimates of unemployment based upon the Census of Unemployment agree very closely for each age group. These findings are in accord with those based upon national figures.(14) Data from the Census of Unemployment, table 15, show the greatest amount of unemployment to occur in the youngest age groups for both men and women. The percentages for women 15 to 19 years of age, and 20 to 24 years are greater than those for men in the corresponding age groups. However, only about 29 percent of the women totally unemployed or emergency workers, were over 35 years of age. The proportion of men over 35 years of age was 45 percent. In explanation of these facts the Census of Unemployment makes the following statement, "A much larger proportion of all unemployed females than of unemployed males is in the younger age groups, as a consequence of the entry of young women into the labor market at a rate nearly as rapid as for young

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(14) Can Employment Service Reports be Used to Measure Unemployment? Part 1, by E. D. Hollander and J. F. Wellemeyer, Jr., Monthly Labor Review, Vol. 46, No. 6, June 1938, pp. 1456 to 1464.

TABLE 13. - POPULATION AND EMPLOYMENT CLASSES, 1930, ESTIMATES OF POPULATION AND UNEMPLOYMENT CLASSES 1937, AND APPLICATIONS IN ACTIVE FILE MISSOURI STATE EMPLOYMENT SERVICE OFFICE, BY SEX, FRANKLIN COUNTY, MISSOURI, 1937

Item	Total	Male		Female	
		Number	Per-cent	Number	Per-cent
Population, 1930(1)	30,519	15,736	51.6	14,783	48.4
Gainful workers, 1930(2)	11,569	9,395	81.2	2,174	18.8
Class "A"(3)	198	177	89.4	21	10.6
Class "B"(3)	88	66	75.0	22	25.0
Classes "A" and "B"(3)	286	243	85.0	43	15.0
Estimated population 1937(2)	30,702	15,735	51.2	14,967	48.8
Estimated gainful workers 1937(2)	12,173	9,415	77.3	2,758	22.7
Estimated totally unemployed(4)	1,882	1,314	69.8	568	30.2
Estimated emergency workers(4)	308	277	89.9	31	10.1
Estimated partly unemployed(4)	995	809	81.3	186	18.7
Estimated totally unemployed and emergency workers	2,190	1,591	72.6	599	27.4
Estimated all unemployment classes	3,185	2,400	75.4	785	24.6
Applications in active file Missouri State Employment Service office(5)	1,351	1,314	97.3	37	2.7

(1) See table 7.
(2) See table 11.
(3) Fifteenth Census of the United States, 1930, Unemployment Bulletin, Missouri, p. 19.
Class "A": Persons out of a job, able to work, and looking for a job.
Class "B": Persons having jobs but on lay-off without pay, excluding those sick or voluntarily idle.
(4) See table 46.
(5) See table 12.

TABLE 14. - APPLICATIONS IN ACTIVE FILE BY AGE GROUP, SEX, AND PERCENT IN EACH AGE GROUP, MISSOURI STATE EMPLOYMENT SERVICE OFFICE, FRANKLIN COUNTY, MISSOURI, NOVEMBER 1937(1)

Age group	Total		Male		Female	
	Number	Percent	Number	Percent	Number	Percent
Total	1351	100.0	1314	100.0	37	100.0
15 to 19	30	2.2	22	1.7	8	21.6
20 to 24	269	19.9	265	20.2	4	10.8
25 to 34	339	25.2	329	25.1	10	27.1
35 to 44	283	20.9	275	20.9	8	21.6
45 to 54	212	15.7	209	15.9	3	8.1
55 to 64	153	11.3	149	11.3	4	10.8
65 to 74	61	4.5	61	4.6	-	--
75 and over	4	.3	4	.3	-	--

(1) From official tabulation sheets, Office of the Director, Missouri State Employment Service, Jefferson City, Missouri.

TABLE 15. - ESTIMATED NUMBER OF TOTALLY UNEMPLOYED AND EMERGENCY WORKERS BY AGE GROUP, SEX, AND PERCENT IN EACH AGE GROUP, FRANKLIN COUNTY, MISSOURI, NOVEMBER 1937(1)

Age group	Total		Male		Female	
	Number	Percent	Number	Percent	Number	Percent
Total	2190	100.0	1591	100.0	599	100.0
15 to 19	462	21.2	303	19.0	159	26.5
20 to 24	382	17.4	260	16.3	122	20.4
25 to 34	460	21.0	315	19.9	145	24.2
35 to 44	331	15.1	259	16.3	72	12.0
45 to 54	251	11.5	194	12.2	57	9.5
55 to 64	211	9.6	174	10.9	37	6.2
65 to 74	84	3.8	80	5.0	4	.7
Not reported	9	.4	6	.4	3	.5

(1) See table 47.

TABLE 16. - APPLICATIONS IN ACTIVE FILE AND ESTIMATES OF UNEMPLOYMENT FOR MALE GAINFUL WORKERS BY SELECTED AGE GROUPS AND PERCENT IN EACH AGE GROUP, FRANKLIN COUNTY, MISSOURI, NOVEMBER 1937(1)

Age group	Employment office applications		Estimates, Census of Unemployment	
	Number	Percent	Number	Percent
Total	1,288	100.0	1,282	100.0
20 to 24	265	20.6	260	20.3
25 to 34	329	25.5	315	24.6
35 to 44	275	21.4	259	20.2
45 to 54	209	16.2	194	15.1
55 to 64	149	11.6	174	13.6
65 to 74	61	4.7	80	6.2

(1) See tables 14 and 15.

men, and of the withdrawl of very many of them a little later to become homemakers."(15)

4. Distribution by Color. Table 17 shows the estimated unemployment by color in Franklin County, November 1937. It will be seen that Negroes constitute 2.3 percent of the estimated number of gainful workers but that they made up 3.6 percent of the totally unemployed and emergency workers. In other words, Negroes suffered a greater degree of unemployment than their numbers in the gainful worker group would indicate were they subjected to the same influences as those operating to produce unemployment of whites. The fact that discrimination prevailed against Negroes was confirmed by local sources. They were the first to be laid off when work was slack and the last to be rehired when employment conditions improved. The proportion of Negroes, however, in the population is so small that they do not constitute a major problem.

5. Distribution by Occupational Group. Table 18 shows that 25 percent of the female, and 12.8 percent of the male totally unemployed and emergency workers were classified

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(15) Census of Partial Employment, Unemployment, and Occupations, 1937, p. 28.

TABLE 17. - ESTIMATED UNEMPLOYMENT BY COLOR, FRANKLIN COUNTY, MISSOURI, NOVEMBER 1937(1)

Color	Gainful workers		Totally unemployed and emergency workers	
	Estimated number	Percent	Estimated number	Percent
Total	12,173	100.0	2,195	100.0
White	11,895	97.7	2,117	96.4
Negro	278	2.3	78	3.6

(1) See Appendix, 5.

as "new workers". These high percentages of inexperienced workers were to be expected because table 15, shows that nearly 47 percent of the females and 35 percent of the males were 15 to 24 years of age. Many of these young people had never obtained gainful employment, others had acquired insufficient experience to permit their classification in any of the occupational groups provided by the Census of Unemployment. Table 18 also shows that 63.6 percent of the male totally unemployed and emergency workers are either semiskilled, farm, or "other" laborers. This distribution may be compared with that for occupations in the active file of the employment office, where 74.3 percent of the applicants were classified as laborers.(16) The difference in these percentages is due in most part to the fact, previously shown, that 12.8 percent of the male totally unemployed and emergency workers were "new workers". When new workers are removed from the total for males the percentages for these occupational groups become as follows:

Semiskilled workers	28.8 percent
Farm laborers	19.2 percent
Other laborers	24.9 percent

The percentage accounted for by these groups is 72.9 which agrees very closely with 74.3, the percentage of laborers in the active file in the employment office.

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(16) See table 12.

TABLE 18. - TOTALLY UNEMPLOYED AND EMERGENCY WORKERS BY SEX, OCCUPATIONAL GROUP, AND PERCENT IN EACH GROUP, FRANKLIN COUNTY, MISSOURI, 1937(1)

Occupational group	Total		Male		Female	
	Number	Percent	Number	Percent	Number	Percent
All occupations	1,521	100.0	1,221	100.0	300	100.0
Professional persons	17	1.1	13	1.1	4	1.3
Farmers (owners and tenants)	33	2.2	33	2.7	-	-
Other proprs.,mgrs.,and off.	10	.7	9	.7	1	.3
Clerks and kindred workers	91	6.0	54	4.4	37	12.3
Skilled workers and foremen	134	8.8	134	11.0	-	-
Semiskilled workers	434	28.4	307	25.1	127	42.4
Farm laborers	207	13.6	205	16.8	2	.7
Other laborers	266	17.5	265	21.7	1	.3
Servant classes	62	4.1	17	1.4	45	15.0
Occupations not reported	36	2.4	28	2.3	8	2.7
New workers 15-24 years	149	9.8	107	8.8	42	14.0
25 and over	82	5.4	49	4.0	33	11.0

(1) Census of Partial Employment, Unemployment, and Occupations, 1937, Vol. II, p. 448. These data are not corrected for under-enumeration.

6. Distribution by Place of Residence. Table 19 shows the population in 1930, 15 years old and over, by sex and place of residence compared with the totally unemployed and emergency workers, 1937. The Census of Unemployment included only those persons from 15 to 74 years of age while the figures available for Franklin County comprise all persons 15 years old and over. Since only 2.2 percent of the population of Franklin County is 75 years old and over, or of unknown age, conclusions drawn from the two sets of figures will not be subject to any considerable error from that lack of comparability. However, there is a source of error to be taken into consideration in a direct comparison of the figures. The possibility of error arises from the fact that changes in the proportions of farm and non-farm residents undoubtedly have taken place between 1930 and 1937. No quantitative measures of these changes in Franklin County are available, but these figures suggest that unemployment was less severe in the case of farm workers than for

TABLE 19. - POPULATION 15 YEARS OLD AND OVER, 1930, AND ESTIMATES OF UNEMPLOYMENT, 1937, FOR FRANKLIN COUNTY, MISSOURI, AND PERSONS ENUMERATED IN CHECK AREAS FOR THE UNITED STATES, 1937, BY SEX, FARM OR NON-FARM RESIDENCE, AND PERCENT DISTRIBUTION(1)

Area, etc.	Male				Female			
	Farm		Non-farm		Farm		Non-farm	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Franklin County								
Population, 1930(1)	5,324	47.3	5,931	52.7	4,305	41.3	6,118	58.7
Totally unemployed and emergency workers, 1937(2)	322	27.1	862	72.9	46	15.7	247	84.3
United States(3)								
Population, 1937	156,743	21.6	568,321	78.4	138,001	18.6	602,459	81.4
Totally unemployed and emergency workers, 1937	17,714	15.6	95,589	84.4	5,588	9.6	52,481	90.4

(1) Calculated from tables in the Fifteenth Census of the United States, 1930, Population, Vol. III, Pt. I, p. 1349.

(2) Census of Partial Employment, Unemployment, and Occupations, Vol. II, p. 430. Not corrected for under-enumeration.

(3) Census of Partial Employment, Unemployment, and Occupations, 1937, Vol. IV, pp. 47 and 48. Data refer to persons enumerated in the check areas.

non-farm workers. This conclusion is further substantiated by the enumerative check of the Census of Unemployment, where for both males and females unemployment for the farm group is proportionately less than their numbers in the population.

It has been pointed out in the Census of Unemployment(17)

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(17) Census of Partial Employment, Unemployment, and Occupations, 1937, Vol. IV, p. 42.

that the nature of unemployment is not so easily understood for persons living on farms as for non-farm persons. It is stated there, "It would appear that, although those living on farms may suffer from inadequate income they should not suffer from unemployment, at least not during certain seasons." The Census of Unemployment continues, "Unemployed persons living on farms may be regular farm laborers out of work, or they may be unpaid family workers who are seeking employment for pay. Likewise, they may be members of farm families who have lost their jobs elsewhere and returned to the family as a temporary means of support, persons on farms who expect to farm part time while working outside, or farmers who are not needed on the farm at this particular season and are actively seeking other employment."

The reasons for the unemployment of the farm population presented to describe the national picture are equally appropriate to the situation in Franklin County, as indicated by our field study.

7. Summary. A number of conclusions may now be made from this brief analysis of unemployment figures in Franklin County:

Unemployment in 1930 in Franklin County had not assumed large proportions.

By 1937 unemployment had increased markedly to the extent that nearly 18 percent of the gainful workers were either totally unemployed or emergency workers.

Unemployment in 1930 was proportionately greater for male than for female gainful workers, but in 1937 this condition was reversed and it was greater for female than for male gainful workers.

"New workers", 15 to 24 years of age accounted for 25 percent of the female and 12.8 percent of the male, totally unemployed and emergency workers.

Unemployment was greater for colored than for white gainful workers. The small number of colored gainful workers in the county, however, prevented this fact from becoming a distinct "problem".

Unemployment was found in greatest amount in the following three occupational classes; semiskilled workers, "other" laborers, and farm laborers. The semiskilled workers were apparently those who at one time had been attached to the shoe industry.

Unemployment was most prevalent in the youngest age groups for both men and women.

Farm residents suffered less from unemployment than non-farm residents.

F. School Population and Enrollment

An enumeration of children of school age, i.e. over 6 and under 20, is made annually by the county clerks in all Missouri counties. These data for Franklin County 1930 to 1937, are shown in table 20 together with the enrollment in rural district schools, first-class high schools, and the percentage of pupils enrolled. The population by selected age groups and the number and percent attending school are shown in table 21 for Franklin County as enumerated in the United States Censuses of 1920 and 1930. These statistics indicate that for the 17 years from 1920 to 1937, school population had remained fairly constant. From table 21 it will be seen that the percentage of the population attending school in 1920 and 1930 remained practically unchanged. It should be remembered that for purposes of the United States Census, population attending school includes all persons who are members of the household and who attend school even though they may not reside at home. The data from the annual reports of the state superintendent of schools of Missouri show for each county only those students who are enrolled in the public schools. The reports do not include students who are residents of the county but attending schools elsewhere, nor students of private and parochial schools. This lack of comparability accounts for the discrepancy between the percent attending school reported by the United States Census of 1930 and the percent enrolled in Franklin County as reported by the state superintendent of schools. It will be seen from table 20 that the school population increased from 8,401 in 1930 to 8,613 in 1937, an increase of 2.5 percent. During this period the enrollment in rural district schools declined from 2,507 to 2,437, a decrease of 2.8 percent. High school enrollment, however, increased from 2,463 in 1930 to 2,987 in 1937, or 21.3 percent. The county superintendent of schools stated that the number of children attending the first and second grades had declined during the period, 1930 to 1937. This decline was compensated by the increased enrollment in high schools, but the superintendent expected the decline in enrollment to progress upward from the lower grades. The increased enrollment in schools between 1931 and 1934 is probably the result of the depression which en-

TABLE 20. - POPULATION OVER 6 AND UNDER 20 YEARS OF AGE, ENROLLMENT IN DISTRICT SCHOOLS AND FIRST CLASS HIGH SCHOOLS, AND PERCENT ENROLLED, FRANKLIN COUNTY, MISSOURI, 1930 TO 1937(1)

Item	1937	1936	1935	1934	1931	1930
Population over 6 and under 20	8613	8543	8551	8496	8406	8401
Enrollment in rural districts	2437	2519	2628	2674	2444	2507
Enrollment in first class high schools	2987	2995	2869	2956	2509	2463
Total enrollment	5424	5514	5497	5630	4953	4970
Percent enrolled	63.0	64.5	64.3	66.3	58.9	59.2

(1) Data compiled from annual reports of the public schools of the State of Missouri, issued by the State Superintendent of Public Schools, Jefferson City, Missouri.

TABLE 21. - POPULATION BY SELECTED AGE GROUPS AND NUMBER AND PERCENT ATTENDING SCHOOL, FRANKLIN COUNTY, MISSOURI, 1920 AND 1930

Age group	1930(1)			1920(2)		
	Total	Attending school		Total	Attending school	
		Number	Percent		Number	Percent
7 to 20	8,351	5,570	66.7	8,314	5,641	67.8
7 to 13	4,217	4,099	97.2	4,413	4,170	94.5
14 and 15	1,207	872	72.2	1,208	919	76.1
16 and 17	1,274	423	33.2	1,175	392	33.4
18 to 20	1,653	176	10.6	1,518	160	10.5

(1) Fifteenth Census of the United States, 1930, Population, Vol. III, Pt. 1, p. 1341.

(2) Fourteenth Census of the United States, 1920, Population, Vol. III, p. 554.

couraged students to continue their education since employment opportunities were lacking. Another factor that may have bearing upon this situation is that children may have been withdrawn from schools outside the county and from private and parochial schools inside the county and sent to the county public schools as an economy measure. Statistics are not available concerning the enrollment in private and parochial schools with which to substantiate this conclusion.

Students beyond the age of 14 tend to drop out of school more rapidly in Franklin County than in most other counties of the state. A comparison of school attendance in the county and the state for selected age groups in 1930 follows:

TABLE 22. - PERCENT OF SCHOOL POPULATION ATTENDING SCHOOL BY AGE GROUPS, FRANKLIN COUNTY AND THE STATE OF MISSOURI, 1930(1)

Area	Percent attending school in each age group			
	7 to 13	14 and 15	16 and 17	18 to 20
Franklin County	97.2	72.2	33.2	10.6
State of Missouri	96.8	85.7	51.6	20.0

(1) Fifteenth Census of the United States, 1930, Population, Vol. III, Part. I, p. 1339 and p. 1341.

In the younger age group the attendance in the county schools is above the average for the state. As one moves upward through the age groups Franklin County drops far below the state average. Scarcely half so many persons 18 to 20 years of age are attending school in Franklin County as in the state.

With the exception of one other county, Franklin County had the lowest school attendance in the state among the population 14 to 20 years of age.

The explanation is not to be found primarily in inferior school facilities. Franklin County's expenditures per school child are not excessively low in comparison with

other counties.(18) Field study revealed that one of the chief reasons for pupils leaving school, especially after 16 years of age, is to obtain employment either in the county or the St. Louis Industrial Area. Though the opportunities may have been inadequate in comparison with supply, still they were greater in these two areas than in many other counties of the state. That the mere fact of proximity to St. Louis encourages migration at an early age seems indicated by the fact that the other counties near the St. Louis Industrial Area were also far below the state average in school attendance, although their school facilities were about average.

A second explanation for Franklin County's low attendance seems to lie in the indifference to education shown by some of the older farm families, according to local school authorities. These families believe in grade school education but consider high school education to be an unnecessary luxury.

School authorities of Franklin County state that there is a tendency away from college preparatory courses in the direction of vocational education. This trend apparently reflects the desire of the pupils to obtain work in the small factory towns of the county or in St. Louis. There seems to be an increasing popularity of business courses, which include shorthand, typing, accounting, letter-writing, etc. These courses prove particularly popular among girls but boys are also taking them in large numbers.

G. Mobility of Labor

In Franklin County the increased mobility of labor has been one of the most significant changes in the last 30 years. The effects of this change are well stated by one shoe factory executive, as follows:

> "Twenty years ago all of our workers lived within a three-mile radius of our plant. They walked to and from the factory. Three miles was about the far-

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(18) The Farmer and the Cost of Local Rural Government in Missouri, by Conrad H. Hammer and Glen T. Barton, University of Missouri College of Agriculture, Agricultural Experiment Station, Bulletin 385, 1937, p. 24.

> thest distance away they could live and still walk to and from the factory.
>
> "Now, our workers live 10, 20, and sometimes even 30 miles away. Nearly all of them drive to work."

The almost revolutionary effect of this increased mobility has completely altered the local labor market. This executive continued in the following words:

> "It used to be that when business was active we might exhaust the local supply, which was quite limited. Farm boys and girls living over three miles away never thought of trying to work here.
>
> "A few months ago we let it be known that we were going to take on some additional workers. The following day hundreds came from 15 and 25 miles around to apply and the day after that scores more came. Most of these were boys and girls who jumped into their cars after a few minutes' notice and applied here a half hour later. Twenty years ago they could not have done this. The automobile has completely changed our labor market.
>
> "This increased mobility makes it appear that there are a great many more people looking for work than formerly. Actually, the farm youth may be as well off now on the farm as before, but, before, they stayed on the farm. They didn't know about factory jobs and they could not have gotten to them if they had.
>
> "To an untrained observer it may appear that the number of unemployed has increased tremendously over the number 20 or 30 years ago. To some extent this may be true. But a large part of this apparent surplus labor is a reflection of the increased ability of people over a larger area to apply for jobs in a specific locality."

It is the opinion of many local persons that the increased mobility has added greatly, not only to the local (Franklin County) labor market, but to the unemployment problem in St. Louis. A great many farm boys would have been content to stay on the farm 20 to 30 years ago. They didn't have current information about urban jobs and found it difficult to get to them when information was available. Today, although the standard of living on the farm may even be lower than it was 20 to 30 years ago, these youth now have easy access to St. Louis by means of cheap automobiles. They come into St. Louis during peak seasons and remain there during the slack seasons. They are counted among the unemployed. They may be supported by relief. The increased mobility of the labor supply in the rural area surrounding St. Louis has contributed to the overcrowding of the St. Louis labor market.

H. Social Attitudes

It was the general opinion among the residents of Franklin County that there has been a complete change in social attitudes during the past 25 years. Especially does this apply to the younger generation which is just now entering the labor market.

These young workers differ from the previous generations in their entire social outlook, in the standard of living which they expect, the sacrifices they will make for the future, the kinds of occupations they want, the hours they want to work, the size of families they want to raise, and so on through the long list of personal reactions of the individual to his environment. These changes in social attitudes have had immediate and unmistakable effect on the labor supply. A brief discussion is, therefore warranted at this point.

1. Rural vs. Urban Life. There seems to be no lessening of the desires of a large number of Franklin County rural youth to get off the farm. If anything, the desire to get away has increased in recent years. One youth said:

> "Last year wheat sold at $1.00 a bushel. We thought we had something. My dad held his wheat. Last week he sold it for 55¢. That 55¢ isn't enough to pay any more than bare expenses. I'm not stickin' to farmin' - I'm leavin' next week."

Another youth commented as follows:

> "My folks saved every single penny they could for 20 years to pay for the farm and spent nothin' on themselves. Now they've lost the farm and are just rentin'. Do you think I'm goin' to do that? Not on your life! I don't know what I'll do next year when I graduate from high school but I know it won't be farmin'."

The objections to farming voiced by high school students interviewed ran something as follows: "Hours too long"; "Nothing to do but work and sleep"; "No regular cash income"; "Can't buy what you want"; "You have to work too hard"; "It's too lonely"; "You don't get paid anything for what you do".

Most of the farm workers expressed a desire to get factory jobs in the rural towns. Fewer of them were determined to go directly into the St. Louis Industrial Area in search of employment. The factory workers seemed generally satisfied to remain in the rural towns if the "wages were right". Trade union leaders in the shoe industry stated that many shoe workers have migrated into St. Louis after working in the rural towns.

2. Standards of Living. Regardless of whether they stay on the farm or move to a rural town or into a large urban center, there seems to be a united front against what is called "sacrifice living". One banker stated the problem as follows:

> "Twenty years ago a young man would marry fairly young. His parents and perhaps hers would give them a little furniture, a cow, a pig and a few chickens. The young husband would start out as a day laborer. By saving carefully he could acquire enough equipment in a few years to rent a farm for himself. Then, after a few more years of hard living and saving he would be able to get enough money together to make his first down payment on a farm of his own. Then, it would take further sacrifices for a period of years to pay for the farm."
>
> "Do young people do this today? No, it is very unusual when they do. Today

> in our community they want a regular cash income. They want to spend it to raise immediately their standards of living. Most of our young wage earners around here are now in debt for cars, radios, washing machines, and most everything else."

Many young farmers, some of them paying for their farms, admitted that neither they nor anyone else in their community would engage in the so-called "sacrifice farming". The latter term was applied to the methods of farming adopted by most couples who, a few generations ago, wanted to acquire ownership of land, as mentioned in the foregoing statement by one of the community's leading bankers.

Concerning the precarious financial condition of many young farmers, and the little cash they seem to have on hand, one young farmer said:

> "I'll admit that I don't seem to be able to do without a car and a tractor, yet they both take a great deal of cash every week for gasoline, but no one else around here seems able to do without them, either."

The farmers testified to the fact that now the young housewives are not putting up canned foods, as in previous generations. It is too much work. They are not baking bread, as they did 50 years ago: They buy it in town. Fewer and fewer farmers are butchering their own meats. More and more of them want to buy their meats in town. Many farmers are now even buying their butter and sometimes eggs. They would like to concentrate on one cash crop, and buy everything in town, but this calls for more cash, of which the average farmer has but little. This attitude may in part account for the trend to dairy farming as described in the next section.

There is a constant and never-ending effort being made to do away with household drudgery, to get into town more often, to visit relatives more frequently, etc. Farmers are giving up saving and investing in order to have more immediate enjoyments.

Despite the increased financial difficulties, it was generally agreed that farm life is becoming easier. One of the main implement dealers said he always sells a combine to the housewife first. When she realizes it will dispense with the feeding of farm hands every fall she im-

mediately is "sold" on the machine. "Selling" the husband is then easy.

This seemingly irresistable effort to raise the present standards of living has had an important affect upon the labor supply. Young workers are very ready to leave the farm for any kind of factory work. The farm youth have determined upon a definite minimum standard of living. To acquire ownership of land would involve giving up this standard. The present would have to be sacrificed for the future. This the farm youth of today are unwilling to do.

It is very clear that most of these young farmers will never own their own farms, if they continue to spend their incomes for immediate enjoyment. There is every reason to believe that they are going to insist on raising their standards of living and will care less about the so-called "sacrifice farming". This makes the population on the farms more restless. When the farm prices fall it puts many of them on relief. They have few savings as a reserve.

Changing social attitudes are also reflected in the decline in the size of family. The county superintendent of schools stated in a recent interview that within the last three years the enrollment in the first and second grades has decreased. This indication of the curtailment of the birth rate in rural areas, if continued may in time bring the population more in line with the employment opportunities.

The desire for higher standards may be illustrated in the following case:

A young girl graduated from high school. She came from a family of six. Her high school education acquainted her with many new aspects of life, and had broadened her knowledge of her local community, the state and the country, as a whole. On the farm she had nothing to look forward to but hard work, very little companionship, and practically no cash income. She came to St. Louis and found it difficult to get work. She finally managed to get a job at a roadside inn for $5.00 a week. This seems to be an extremely low income but to her it was much higher then she would have had on the farm. Later, she got a job at a 5-and-10-cent store for $10.00 a week. When last questioned about how she could possibly live well on such a low income, she stated that although it was a low wage, it was easier work, and better pay than she would get at home, and that she would never return to the farm under any circumstances. Twenty years ago this girl might have been satisfied to remain on the farm and with only a grade school ed-

ucation she would not have become acquainted with new interests, new subjects. She would have had no alternative but to remain on the farm and to make her adjustments in a rural community. This is not true today.

3. Causes of Changes in Social Attitudes. Two of the principal factors explaining the change in social attitudes are the automobile (together with hard roads) and higher education. The automobile has acquainted farm youth with the cities, and with such urban forms of entertainment as the movies. Higher education has broadened their interests, and their outlook. It has acquainted them with many kinds of occupations. It has stimulated imitation of urban life with its alleged higher living standards. Occasionally, through fortunate circumstances, a boy from a rural community secures a well paid job in St. Louis. Later, he returns to visit friends and relatives who find him well dressed, driving a car and with ready cash in his pockets. One instance such as this, in the minds of dissatisfied young people, far outweighs the fact that others have tried and failed to obtain a good job at fair pay in the city.

III. THE DEMAND FOR LABOR

A. Trends of Agricultural Employment

1. Types of Farming. There has been in recent years, a general trend away from grain farming to livestock and more diversified farming in Franklin County.(1) In the period immediately following the World War, about 60 percent of the farms were of the cash-grain type. In the remainder, livestock farming was practiced. Today, about 60 percent of the farms are livestock farms and the remainder are cash-grain farms, thus reversing the previous relationship. The expansion of livestock was in dairy herds at the expense of beef herds as shown in table 23. The expansion accompanied the improvement in rural transportation services.

The decline of cash-grain farming may be seen in the fact that between 1920 and 1935 there was a decrease of 42 percent in the number of acres in crops as shown in table 24. In the last 35 years corn acreage was reduced 26 percent. Table 25 shows that between 1919 and 1935, wheat acreage was reduced 47 percent, and the acreage devoted to oats fell nearly 70 percent between 1899 and 1930.

Fruit crops have likewise undergone reductions. The number of apple trees fell 66 percent, and the number of peach trees declined 47 percent between 1900 and 1935. These data are shown in table 26. Other fruit crops like cherries, grapes, and small fruits have never been of great consequence in Franklin County.

The change in type of farming has been accompanied by an increase in efficiency and a consequent decrease in the demand for labor. The increase in efficiency on cash grain farms as a result of the tendency toward mechanization has been marked and will be pointed out in more detail in the following section. This increase in efficiency which has resulted from the use of power machinery has also influenced the operation of dairy farms in so far as they are concerned with the production of grain for feed.

Other mechanization has also served to increase the efficiency of dairy farms. Much of the processing of dairy farm products formerly done by the farmer are now performed by creamery and ice cream plants. These changes are reflected

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(1) From estimates of local county agricultural agent.

TABLE 23. - CATTLE ON FARMS, DAIRY COWS, AND OTHER COWS, BY NUMBER AND PERCENT CHANGE, FRANKLIN COUNTY, MISSOURI, 1900 TO 1935

Item	1935 (1)	1930 (2)	1925 (2)	1920 (2)	1910 (3)	1900 (4)
Cattle on farms (5)	27,415	27,772	23,221	27,586	22,637	25,353
Percent change	-1.3	+ 19.6	- 15.8	+ 21.9	- 10.7	--
Dairy cows	(6)	13,003	8,407	10,814	10,410	8,783
Percent change		+ 54.7	- 22.3	+ 3.9	+ 18.5	--
Other cows	(6)	933	6,201	4,395	3,265	1,847
Percent change		- 85.0	+ 41.1	+ 34.6	+ 76.8	--

(1) United States Census of Agriculture, 1935, Missouri, Statistics by Counties, Farms, Farm Acreage and Value, and Selected Livestock and Crops, p. 17.

(2) Fifteenth Census of the United States, 1930, Agriculture, Missouri, Statistics by Counties, First Series.

(3) Thirteenth Census of the United States, 1910, Agriculture, Vol. VI, p. 909.

(4) Twelfth Census of the United States, 1900, Agriculture, Pt. 1, p. 454.

(5) The sum of "Dairy Cows" and "Other Cows" will not equal "Cattle on Farms", because the former two items do not include all the young stock.

(6) Data not available.

in table 27. The production per animal has increased without a proportional increase in the labor required for its maintenance and care. Electricity has improved refrigeration and permitted the use of power operated milking machines, separators, pumps, etc. As a slight off set to the gain in efficiency accomplished by these factors there has been an increase in the work necessary to meet more rigid dairy inspection requirements regarding sanitation and the processing of products. However, the net result of the operation of all these factors has been a decrease in the labor requirements.

A change-over from a cash grain farm to a dairy farm in 1920 would have meant an increase in labor requirements because of the additional work necessary for the daily

TABLE 24. - ACRES IN CROPS BY NUMBER AND PERCENT CHANGE, FRANKLIN COUNTY, MISSOURI, 1900 TO 1935

Year	Number	Percent increase or decrease
1935	(1)167,317	- 6.5
1930	(2)178,921	- 5.0
1925	(2)188,395	- 35.2
1920	(3)290,608	+ 4.6
1910	(3)277,786	+ 5.3
1900	(3)263,711	-

(1) United States Census of Agriculture, 1935, Missouri Statistics by Counties, p. 9.
(2) Fifteenth Census of the United States, 1930, Agriculture, Missouri Statistics by Counties, First Series, p. 9.
(3) Fourteenth Census of the United States, 1920, Agriculture, Vol. VI, Part I, p. 581.

care and maintenance of the animals, including their milking and the preparation of their feed, and for the care of utensils and the premises. To compensate somewhat for this increase in demand for labor the conversion of cash grain farms to dairy farms brought about a decrease in the seasonal demand for workers because of reduced grain acreage. The result of the increase in efficiency of operation of both dairy farms and cash grain farms permitted the convertion of one-third of the cash grain farms to dairy farms, without increasing the demand for labor. As a matter of fact, a decrease in the demand for labor took place although the decrease was less than would have been the case had the types of farming remained constant. These changes may be quantitatively expressed by the hypothetical example shown in table 28.

Table 28 shows a decrease in labor requirements of 10 men for every 40 cash grain farms which remained in continuous operation during the period. A similar reduction has taken place on dairy farms which were in opera-

TABLE 25. - ACRES IN WHEAT, CORN AND OATS BY NUMBER AND PERCENT CHANGE, FRANKLIN COUNTY, MISSOURI, 1899 TO 1934

Item	1934(1)	1929(2)	1924(3)	1919(4)	1909(5)	1899(6)
Winter wheat, acres	42,229	36,081	42,583	80,157	65,722	75,412
Percent change	+ 19.8	- 15.3	- 46.9	+ 22.0	- 12.8	--
Corn, acres	44,647	46,425	47,110	51,589	57,623	60,613
Percent change	- 3.8	- 1.5	- 8.7	- 10.5	- 4.9	--
Threshed oats, acres	1,676	4,356	4,427	10,810	7,343	14,387
Percent change	- 61.5	- 1.6	- 59.0	+ 47.2	- 49.0	--

(1) United States Census of Agriculture, 1935, p. 280.
(2) Fifteenth Census of the United States, 1930, Agriculture, Missouri Statistics, by Counties, First Series, p. 43.
(3) United States Census of Agriculture, 1925, p. 954.
(4) Fourteenth Census of the United States, 1920, Agriculture, Vol. VI, Pt. 1, p. 603.
(5) Thirteenth Census of the United States, 1910, Vol. VI, p. 931.
(6) Twelfth Census of the United States, 1900, Part II, Section I, p. 172.

tion for the entire period. For those cash grain farms which were converted to dairy farms, it is estimated that the labor demand remained about the same. Increased efficiency compensated for the additional work to be performed. The evaluation of these estimates by the number of farms related to the decrease in farm population suggests that they are conservative.

2. Mechanization of Farming. An enumeration by the United States Census of Agriculture showed that in 1925 there were 286 tractors in Franklin County, and that the number increased by 1930 to 476.(2) Data published by the

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(2) United States Census of Agriculture, 1925, p. 922, and Fifteenth Census of the United States, 1930, Agricul-

TABLE 26. - NUMBER OF FRUIT TREES AND VINES, FRANKLIN COUNTY, MISSOURI, 1900 TO 1935

Item	1935(1)	1930(2)	1925(3)	1920(4)	1910(5)	1900(6)
Apple trees	65,371	78,500	70,742	96,972	116,975	194,167
Peach trees	35,092	42,760	40,529	49,512	(7) 66,112	66,164
Cherry trees	6,268	4,580	(8)	10,828	6,561	5,394
Grape vines	68,970	65,476	63,828	58,129	61,891	71,345

(1) United States Census of Agriculture, 1935, Missouri Statistics by Counties, Second Series, p. 28.
(2) Fifteenth Census of the United States, 1930, Agriculture, Missouri Statistics by Counties, Second Series, p. 20.
(3) United States Census of Agriculture, 1925, p. 954.
(4) Fourteenth Census of the United States, 1920, Agriculture, Vol. VI, Pt. I, p. 603.
(5) Thirteenth Census of the United States, 1910, Agriculture, Vol. VI, p. 931.
(6) Twelfth Census of the United States, 1900 Agriculture, Pt. II, Section 7, pp. 658 to 659.
(7) Includes nectarines.
(8) Data not available.

Farm Journal showed that the number in 1937 was 922, and it has been estimated that this had increased to 1,014 by the fall of 1938.(3) In the 14-year period covered by these data, the number of tractors increased 354 percent, or an average increase of 52 tractors per year.

One of the prominent implement dealers estimated that about 50 percent of the farms in the county which could profitably use tractors now have them (1938). This dealer estimated that 80 percent of the tractors sold required the trade-in of an old tractor. Many of the latter are sold to

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ture, Missouri, Statistics by Counties, Second Series, Selected Crops and Livestock, Mortgages, Taxes, etc., p. 47.

(3) An Analysis of Tractors on Farms, Farm Journal Inc., Philadelphia, 1937, p. 19.

TABLE 27. - MILK PRODUCTION, BUTTER CHURNED ON FARMS, AND CREAM SOLD AS BUTTERFAT, FRANKLIN COUNTY, MISSOURI, 1899 TO 1934

Year	Milk production (gallons)	Butter churned on farms (pounds)	Cream sold as butterfat (pounds)
1934(1)	5,049,813	224,166	(7)
1929(2)	5,567,518	272,276	734,323
1924(3)	4,154,496	303,087	465,968
1919(4)	3,009,887	401,233	220,922
1909(5)	2,700,553	609,215	(7)
1899(6)	2,834,831	517,245	153,864

(1) United States Census of Agriculture, 1935, Vol. II, p. 295.
(2) Fifteenth Census of the United States, 1930, Agriculture, Missouri Statistics by County, Second Series, Selected Crops, and Livestock, Mortgages, Taxes, etc., p. 27.
(3) United States Census of Agriculture, 1925, Pt. 1, p. 939.
(4) Fourteenth Census of the United States, 1920, Agriculture, Vol. VI, Pt. 1, p. 592.
(5) Thirteenth Census of the United States, 1910, Agriculture, Vol. VI, p. 920.
(6) Twelfth Census of the United States, 1900, Agriculture, Pt. 1, tables 44 and 49.
(7) Data not available.

small operators who cannot afford to buy new equipment.

Estimates of the displacement of labor by the tractor are not available for this area. Informed persons believed, however, that the displacement had been very great. This opinion was substantiated by statistics for six Missouri Counties, shown in table 29. These data suggest the probable trend in Franklin County. For example, cases were cited in which by the use of a tractor one man doubled the amount of land cultivated with no increase in the amount of time expended.

TABLE 28. - ILLUSTRATION OF PROBABLE DECREASE IN LABOR REQUIREMENTS BY TYPE OF FARM, FRANKLIN COUNTY, MISSOURI, 1920 TO 1938

Type of farm	Percent of total	Labor required per farm (number of men)		Labor loss per 100 farms (number of men) 1920 to 1938
		1938	1920	
All types	100			20
Cash grain				
Continuous operation	40	1.25	1.50	10
Converted to dairy	20	1.50	1.50	0
Dairy				
Continuous operation	40	1.50	1.75	10

The widespread adoption of the tractor has been accompanied by the introduction of the corn picker and the combine. Small grain binders have been in use for many years.

Wheat acreage is about 20 percent of total crop acreage in the county. No studies of the effects of mechanization on labor requirements in wheat production have been made in Franklin County. A typical picture of the effects may be obtained from studies in the neighboring state of Illinois. These figures from table 30 indicate that from 1914 to 1937 the man hours required for the production of winter wheat were reduced 80 percent. A reduction of 72 percent in man hours required in the production of soybeans, took place in Champaign County, 1922 to 1937. (See table 31) Man hours required in raising corn were reduced 37.3 percent from 1920 to 1937 in Champaign County. These data are shown in table 32.

This county was very productive. A reduction of man hours probably did not take place in Franklin County to the same degree but the general trend is probably indicated.

Mechanization is limited in Franklin County by topography and low farm income. The rolling hill land is not suited to tractor farming. This hill land constitutes from 75 to 80 percent of the county. The fact that nearly 30 percent of the

TABLE 29. - TIME REQUIREMENTS IN SELECTED FARMING OPERATIONS IN SIX MISSOURI COUNTIES, 1929 TO 1931(1)

Operation performed and power unit	Average number of acres per 10-hour man day
1. Plow land	
2 horses	1.8
3 horses	2.9
4 horses	4.0
10-20 tractor	8.1
2. Harrow land	
2 horses	16.7
3 horses	17.2
4 horses	23.3
10-20 tractor	32.3
3. Disk land	
3 horses	5.2
4 horses	8.6
10-20 tractor	23.8
4. Sow small grain	
2 horses - drill	12.7
3 horses - drill	12.5
4 horses - drill	14.9
10-20 tractor - drill	31.2

(1) Data furnished by B. H. Frame, Assistant Professor of Agricultural Economics, University of Missouri, in a letter of October 20, 1938. The counties are Atchison, Bates, Carroll, Linn, Saline, and Vernon. Most of the data apply to 1929.

farms have tractors indicates that they are being used even on the rolling hill lands, where there is much less economy of operation than on bottomland farms. The low income of the majority of farms prevents further mechanization. About 75 percent of the farmers are "just breaking even", according to the county agent.

TABLE 30. - HOURS OF MAN LABOR, HORSE LABOR, AND TRACTOR USE REQUIRED TO PRODUCE AN ACRE OF WINTER WHEAT IN SELECTED ILLINOIS COUNTIES, 1914 TO 1937(1)

Year(2)	Man hours	Horse hours	Tractor hours
1937	4.8	3.6	2.4
1936	5.6	5.1	2.1
1935	4.3	6.7	1.7
1934	6.6	9.6	1.6
1933	5.7	9.9	1.2
1932	5.3	8.0	1.4
1931	6.2	10.0	.9
1930	6.8	12.9	1.2
1929	9.8	15.7	1.4
1928(3)	-	-	-
1927	10.0	20.5	.9
1926	11.6	22.4	.6
1925	9.2	20.1	.4
1924	10.1	19.0	.5
1923	11.0	19.0	.5
1922	12.9	25.6	.8
1921	13.4	28.4	.6
1920	11.2	19.6	1.1
1919	18.1	49.7	.8
1918	12.1	18.0	2.4
1917(3)	-	-	-
1916	17.5	41.4	-
1915	17.2	38.9	-
1914	23.4	23.6	-

(1) Prepared by the Department of Agricultural Economics, University of Illinois, Urbana, Illinois, and received through correspondence from R. H. Wilcox, Associate Professor, Farm Management.

(2) 1914 - 1919 Hancock County
1920 - 1922 Hancock and Champaign-Piatt Counties (average of averages)
1923 - 1937 Champaign-Piatt Counties
1914 - 1928 All acreage threshed
1929 - 1937 Threshed and combined grain (weighted average)

(3) Data not available, crop winter killed.

To some extent, the use of tractors has increased the attractiveness of farming to young farm boys. One farmer

TABLE 31. - HOURS OF MAN LABOR, HORSE LABOR, AND TRACTOR USE REQUIRED TO PRODUCE AN ACRE OF SOYBEANS IN CHAMPAIGN COUNTY, ILLINOIS, 1922 TO 1937(1)

Year	Man hours	Horse hours	Tractor hours
1937	3.9	1.3	2.2
1936	4.1	2.6	2.3
1935	4.4	3.8	2.4
1934	4.9	7.8	1.5
1933	5.5	7.9	2.5
1932	6.7	12.3	1.7
1931	6.8	11.5	2.1
1930	8.5	18.7	1.8
1929	10.4	20.3	1.7
1928	11.8	22.8	1.5
1927	10.9	22.9	1.8
1926	10.4	25.5	1.0
1925	11.8	26.8	1.5
1924	14.2	28.8	.9
1923	12.2	27.0	.5
1922	13.9	31.4	.7

(1) Prepared by the Department of Agricultural Economics, University of Illinois, Urbana, Illinois, and received through correspondence from R. H. Wilcox, Associate Professor, Farm Management.

stated the problem as follows:

> "A farmer tried in vain to persuade his two boys to remain with him. They were dissatisfied and planned to leave, giving their dislike of driving a "couple of nags" all day as the reason. The farmer bought a tractor and some other new equipment. The boys stuck with him. They liked the tractor. They felt they were more on a par with city boys working in factories."

3. <u>Number of Farms</u>. Table 33 presents statistics permitting comparison of the number and size of farms and the acres under cultivation in Franklin County from 1900 to 1935. For the period 1900 to 1920, the number of farms in

TABLE 32. - HOURS OF MAN LABOR, HORSE LABOR, AND TRACTOR USE REQUIRED TO PRODUCE AN ACRE OF CORN IN CHAMPAIGN COUNTY, ILLINOIS, 1920 TO 1937(1)

Year	Man hours	Horse hours	Tractor hours
1937	8.9	9.2	3.6
1936	8.7	12.2	2.9
1935	11.3	20.6	2.5
1934	10.7	23.3	2.0
1933	10.2	20.4	2.0
1932	11.6	25.2	1.7
1931	12.2	26.6	1.7
1930	12.8	25.1	1.7
1929	12.1	25.9	1.6
1928	13.6	31.1	1.0
1927	12.7	30.6	1.2
1926	14.1	31.2	1.0
1925	13.9	34.1	.9
1924	12.8	28.0	.8
1923	14.4	36.7	.4
1922	13.9	33.5	.9
1921	15.0	33.4	.6
1920	14.2	33.4	.5

(1) Prepared by the Department of Agricultural Economics, University of Illinois, Urbana, Illinois and received through correspondence from R. H. Wilcox, Associate Professor, Farm Management.

Franklin County was stabilized at about 3,850. Total acreage was around 475,000 acres. The average size farm was approximately 124 acres.

The 15-year period, 1920 to 1935, saw a reduction in the number of farms to about 3,450. The total acreage in cultivation was stabilized at 450,000, a reduction of 25,000 acres. The average size farm increased to about 130 acres, as contrasted with 124 acres previously.

The reduction in the number of farms, and the increase in the average size of farms made for decreasing labor requirements.

In the last few years there has been an increase in the number of farms, but this increase was in small farms

TABLE 33. - FARMS BY NUMBER AND AVERAGE SIZE AND TOTAL ACRES IN FARMS WITH PERCENT CHANGE IN EACH, FRANKLIN COUNTY, MISSOURI, 1900 TO 1935

Item	1935(1)	1930(2)	1925(3)	1920(4)	1910(5)	1900(6)
Number of farms	3,548	3,318	3,461	3,845	3,781	3,853
Percent change	+ 6.9	- 4.1	-10.0	+ 1.7	- 2.0	----
Average size of farm (acres)	131.5	133.9	129.3	127.5	126.1	121.1
Percent change	- 1.8	+ 3.6	+ 1.4	+ 1.1	+ 4.1	----
All land in farms (acres)	466,461	444,267	447,680	490,248	476,857	466,598
Percent change	+ 5.0	- .8	- 8.7	+ 2.8	+ 2.2	---

(1) United States Census of Agriculture, 1935, Vol. I, p. 265.
(2) Fifteenth Census of the United States, 1930, Agriculture, Missouri Statistics by Counties, First Series, p. 9.
(3) United States Census of Agriculture, 1925, Pt. I, p. 908.
(4) Fourteenth Census of the United States, 1920, Agriculture, Vol. VI, Pt. I, p. 580.
(5) Thirteenth Census of the United States, 1910, Agriculture, Vol. VI, p. 909.
(6) Twelfth Census of the United States, 1900, Agriculture, Pt. I, p. 286.

of around two to five acres, created by people working in nearby towns, or in St. Louis, according to the county agricultural agent. There would be very little demand for outside labor on such farms.

4. Effects of Declining Fertility. The soil has lost at least 50 percent of its original fertility. The greater portion of the loss is due to erosion. Stream channels have been filling up rapidly. When heavy rains fall, the streams soon overflow, causing much more erosive damage than formerly.

The failure to practice rotation of crops has resulted in depleting the soil of its essential plant foods. Together, these two aspects of "soil mining" have lowered the yield per acre, and hence farm income per acre over the last 50 years, or more.

TABLE 34. - GAINFUL WORKERS 10 YEARS OLD AND OVER BY SEX AND PRINCIPAL INDUSTRY GROUP WITH PERCENT DISTRIBUTION FOR ALL WORKERS AND FOR NON-AGRICULTURAL WORKERS, FRANKLIN COUNTY, MISSOURI, 1930(1)

(Percent not shown where less than 1.0)

Industry group and sex	All gainful workers			Non-Agricultural workers	
	Number	Percent	Cumulative percent	Percent	Cumulative percent
Male					
All industries	9,866	100.0			
Agriculture	4,664	47.2	47.2	--	--
Leather	1,406	14.3	61.5	26.9	26.9
Wholesale and retail trade except automobiles	581	5.9	67.4	11.2	38.1
Building	443	4.5	71.9	8.5	47.6
Steam and street railroads	324	3.3	75.2	6.2	52.8
Industry not specified	246	2.5	77.7	4.7	57.5
Other transportation and communication	243	2.5	80.2	4.7	62.2
Other professional and semi-professional services	222	2.3	82.5	4.3	66.5
Extraction of minerals	177	1.8	84.3	3.4	70.9
Other manufacturing industries	167	1.7	86.0	3.2	73.1
Public service (n.e.c.)	131	1.3	87.3	2.5	75.6
Garages, greasing stations, etc.	113	1.1	88.4	2.2	77.8
Automobile agencies, filling stations, etc.	111	1.1	89.5	2.1	79.9
Other food and allied industries	102	1.0	90.5	2.0	81.9
All other industries	940	9.5	100.0	18.1	100.0

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(1) Fifteenth Census of the United States, 1930, Population, Vol. III, Pt. I, p. 1364.

TABLE 34. - GAINFUL WORKERS 10 YEARS OLD AND OVER BY SEX AND PRINCIPAL INDUSTRY GROUP WITH PERCENT DISTRIBUTION FOR ALL WORKERS AND FOR NON-AGRICULTURAL WORKERS, FRANKLIN COUNTY, MISSOURI, 1930 - Continued

(Percent not shown where less than 1.0)

Industry group and sex	All gainful workers			Non-Agricultural workers	
	Number	Percent	Cumulative percent	Percent	Cumulative percent
Female					
All industries	2,180	100.0			
Leather	974	44.6	44.6	48.2	48.2
Other domestic and personal services	289	13.3	57.9	14.3	62.5
Other professional and semi-professional services	203	9.3	67.2	10.0	72.5
Agriculture	156	7.2	74.4	--	--
Wholesale and retail trade except automobiles	108	5.0	79.4	5.3	77.8
Clothing	68	3.1	82.5	3.4	81.2
Other manufacturing industries	44	2.0	84.5	2.2	83.4
Telegraph and telephone	33	1.5	86.0	1.6	85.0
Independent hand trades	33	1.5	87.5	1.6	86.6
All other industries	272	12.5	100.0	13.4	100.0

5. Changes in the Price Level. It is a well established fact, requiring no substantiation here, that farm prices have been declining since the World War, the low prices having served to reduce farm income. The drastic decline in 1921, and 1929 to 1933, has produced a critical financial situation for a majority of the farmers in this county.

B. Trends of Non-Agricultural Employment

Over four-fifths of all of the non-agricultural wage

earners in Franklin County in 1938 who were covered by the Missouri Unemployment Compensation Act were engaged in manufactures. The remaining workers were rather widely distributed through building and construction, retail trade, professional, and service industries as shown in table 34. Therefore, this study of non-agricultural employment trends, will be confined to manufactures.

The term "wage earners" as used by the United States Censuses of Manufactures means the average number of employees on the payroll as reported by the employing unit. The term, "gainful workers" as used by the United States Censuses of Population includes all persons who are normally employed whether at work or not at the time of the enumeration. Furthermore, "gainful workers" are self-defined while "Wage earners" are reported by their employers. While the data for tables 35 and 36 were not orginally classified in accordance with the terminology of the Census Bureau, appropriate terms have been selected from census usage for the sake of clarity. A breakdown of wage earners in the first five ranking industries in Franklin County, 1923, is presented in table 35.

TABLE 35. - WAGE EARNERS BY NUMBER AND PERCENT IN THE FIVE PRINCIPAL MANUFACTURES, FRANKLIN COUNTY, MISSOURI, 1923(1)

Industry	Number	Percent
All wage earners in manufactures	2,233	100.0
Boots, shoes	1,633	73.1
Cob pipes	238	10.7
Hats, caps	70	3.1
Flour, feed	66	3.0
Boxes, paper	63	2.8
All other manufactures	163	7.3

(1) Forty-fourth Annual Report, Bureau of Labor Statistics, (Now Labor and Industrial Inspection Department), State of Missouri, p. 166.

Table 35 shows that the wage earners were concentrated in a very few industries, in fact, five industries

employed more than 92 percent of the wage earners in all manufacturing industries. The concentration of manufacturing employment is seen to be even greater when it is noted that nearly three-fourths of all wage earners were employed in the boot and shoe industry.

A breakdown of wage earners by the five leading industries in 1938 is shown in table 36.

TABLE 36. - WAGE EARNERS BY NUMBER AND PERCENT FOR THE FIVE PRINCIPAL MANUFACTURING INDUSTRIES, FRANKLIN COUNTY, MISSOURI, 1938(1)

Industry	Number	Percent of total	Percent of wage earners in manufactures
All wage earners in covered industries	3,446	100.0	
All wage earners in manufactures	2,871	83.3	100.0
Boots, shoes	2,543	73.7	88.6
Cob pipes	103	3.0	3.6
Hats, caps	89	2.6	3.1
Creamery	34	1.0	1.2
Clothing	30	0.9	1.0
All other manufactures	72	2.1	2.5

(1) Unpublished data supplied by Missouri Unemployment Compensation Commission. By wage earners is meant all nonagricultural wage earners. Those not covered by the Missouri Unemployment Compensation Act are also excluded.

In 1938 manufacturing was concentrated in even fewer industries than in 1923. The five leading industries in 1938 employed approximately 97 percent of the covered wage earners in manufacturing. Close to 90 percent were employed in the boot and shoe industry.

A comparison of table 35 and table 36 shows that the relative importance of the boot and shoe industry which

dominates manufacturing employment, increased during the 15 years from 1923 to 1938. Making allowance for the fact that table 35 and table 36 are not exactly comparable(4) there was apparently considerable expansion during the 15-year period in the boot and shoe industry, despite the depression years, 1930 to 1934.

The second ranking industry, cob pipes, apparently decreased, whereas the third ranking industry, hats and caps, increased slightly. Flour and feed, and boxes, paper, the fourth and fifth ranking industries, respectively, in 1923, had disappeared from the list of the first five industries by 1938. Their places were taken by creamery and clothing, respectively. The share of these latter two industries, however, in total number of manufacturing employees, is so small as to make them of minor importance.

The changes in employment opportunities during the last 15 years in Franklin County center almost entirely around the boot and shoe industry. Expansion of this industry, undoubtedly, offered employment to many persons who would, otherwise, have left Franklin County. Future migration from this county, therefore, depends upon the trend of employment opportunities in this industry. Continued expansion will serve to check migration.

It was generally agreed that mechanization had turned many skilled jobs formerly done by men into semi-skilled or unskilled jobs now performed by women. The latter constitute a much larger proportion of all jobs in shoe factories now than formerly. They make up a larger proportion of the jobs in rural towns than in large areas such as St. Louis, according to trade union officials.

The boot and shoe industry in Franklin County centers in four communities. In 1938 the three important towns were Washington, with a peak employment of 1,380 workers; Union, with 750; and St. Charles, with 345. For a list of the principal industries by location and number of wage earners at peak employment see table 37.

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(4) The reports of the State of Missouri Labor and Industrial Inspection Department are much less complete than the data furnished by the Missouri Unemployment Compensation Commission. The data compiled by the former are the results of voluntary reporting by private concerns. Insofar as limited field study could show, however, the data used herein reflect the general picture.

TABLE 37. - PRINCIPAL INDUSTRIES BY LOCATION AND NUMBER OF WAGE EARNERS AT PEAK EMPLOYMENT, FRANKLIN COUNTY, MISSOURI, 1938(1)

Industry	Town	Number of wage earners at peak employment
Hat factory	New Haven	89
Brick and tile factory	Pacific	15
Sand and gravel supplies	"	63
Section (railroad)	St. Clair	10
Shoe factory	" "	435
Shoe factory	Sullivan	450
Shoe factory	Union	750
Filling station, restaurant	"	8
Filling station, restaurant	Villa Ridge	80
Breweries	Washington	32
Grain, wholesale and retail	"	8
Cob pipe factories	"	93
Shoe factories	"	1,358
Creamery	"	34
Slip and gown factory	"	30
Department stores	"	28
Building contractor	"	9
Zither factory	"	10
Power and light distribution	"	30
Laundry	"	15

(1) Unpublished data of the Missouri State Employment Service which was obtained from "principal" concerns during first six months of 1938.

C. Federal Government Expenditures

During the five-year period, March 4, 1933 through June 30, 1938, federal expenditures in Franklin County amounted to $2,527,540. This represented an expenditure of $82.81 per capita (1930 population). Federal expenditures per capita (1930 population) for the state amounted to $206.31.

It is impossible to estimate the effects of the distribution of the federal money on the economic life of Franklin County. It may be well to note, however, the various types of loans and grants made through numerous agencies. Expenditures and grants by dispensing agencies are presented in table 38. The most important loans were made through the Reconstruction Finance Corporation and the Public Works Administration. The most important grants and expenditures were made through the Public Works Administration, A.A.A. Benefit Payments, and the Works Progress Administration.

The young workers of the county were particularly affected by employment or assistance from the National Youth Administration, the Civilian Conservation Corps, and the Soil Conservation Service. Entire families have felt the influence of the Farm Credit Administration, the Farm Security Administration and others.

The general effect of the federal monies was to increase the security of the workers in the county. The current conditions were somewhat stabilized and migration was temporarily checked among some parts of the population.

TABLE 38. - FEDERAL GOVERNMENT EXPENDITURES, FRANKLIN COUNTY, MISSOURI, MARCH 4, 1933 TO JUNE 30, 1938(1)

Estimated total of Federal Benefits			$2,527,540
Reconstruction Finance Corp. (from Feb. 2, 1932)	Loans	-	512,915
Federal Land Bank and Commissioner(2)	Loans	-	238,400
Emergency Crop and Feed(2)	Loans	-	13,115
Drought Relief, 1934-35 (Program completed)	Loans	-	5,400
Farm Security Admn. - Rural Rehabilitation	Loans	-	43,795
Home Owners' Loan Corp. (Completed)	Loans	-	106,689
Public Works Admn., Non-Federal Projects	Loan allotments	-	270,000
Rural Electrification Administration (Total project cost divided by counties participating)	Loan allotments	-	- -
	Total repayable		$1,190,314

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(1) National Emergency Council, New Federal Building, St. Louis, Missouri, R. K. Ryland, State Director. In addition, modernization, repair notes and mortgages accepted, mortgages for insurance, amounted to $120,112, in the same period.

(2) These agencies are reporting as of an earlier date.

TABLE 38. - FEDERAL GOVERNMENT EXPENDITURES, FRANKLIN COUNTY, MISSOURI, MARCH 4, 1933 TO JUNE 30, 1938 - Continued

Federal Emergency Relief Administration (Completed)	Obligations	-	91,365
Civil Works Administration (Completed)	Payments	-	54,492
A.A.A. Rental and Benefit (Completed)(2)	Payments	-	333,079
A.A.A. 1936 Conservation Program (Completed)	Payments	-	104,380
Farm Security Admn. - Rural Rehabilitation	Grants	-	21,367
Farm Security Admn. - Farm Debt Adjustment(3)	Reduction	-	13,692
Public Works Admn., Non-Federal Projects	Grant allotments	-	406,252
Public Works Admn., Federal Projects to Oct. 1	Allotments	-	- -
Works Progress Administration	Expenditures	-	242,615
Other Projects under Works Program	Allotments	-	- -
Social Security Board (Recipients of Old Age Assistance, Aid to Dependent Children)(2)	Obligations	-	69,984
	Total non-repayable		$1,337,226
Total Federal Benefits to Franklin County		-	$2,527,540

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(2) These agencies are reporting as of an earlier date.

(3) Farm Debt Reduction and Federal Housing Administration insurance do not constitute Federal expenditures. They are "benefits".

State-wide and District-wide projects of the WPA, PWA, and FSA are not included, nor are expenditures of State and local bodies in conjunction with such agencies as the PWA, WPA, SSB, FERA, and CWA.

Note: Expenditures of the Civilian Conservation Corps, Bureau of Public Roads and 1937 Conservation Payments; Bonus Payments; and loans of the Commodity Credit Corp., Disaster Loan Corp., and the Production Credit Ass'ns under the FCA are not obtainable upon a county basis.

D. Shrinkage of Agricultural Credit

Sources of credit available to young farmers of a generation ago have dried up insofar as the beginners of today are concerned. Many of those who started farming in an earlier day could secure ample funds on their signature from many different sources. Not so today! Character or signature loans - preferably by a government agency - are sorely needed to give young married farmers a start. The big farm mortgage concerns, such as the Federal Land Bank or insurance companies, do not touch this field. Production credit associations of the Farm Credit Administration can do little to help the beginner of today, unless he is possessed of a fair supply of capital. The tenant purchase program of the Farm Security Administration seems a way out of this difficulty but this agency is so limited in funds and personnel that for the time being at least there seems little hope that the young farmer of Franklin County can avail himself of this service.

IV. CONCLUSIONS

A. Agricultural Employment

The opportunities for Franklin County youth to engage in agriculture have declined steadily during the past few decades. Poor farm management has lead to the destruction of soil fertility, erosion has removed a large portion of the top soil and as a result the productivity of the soil per acre has fallen off rapidly. Low farm prices have meant low farm income. These factors have in turn caused former sources of agricultural credit to dry up. It has become increasingly difficult for young workers without means to acquire farm ownership.

Increased efficiency in farming operations has reduced total farm labor requirements and a rapid increase in livestock farming, associated with a proportionate decrease in cash grain farming has spread the demand for labor over 12 months of the year, thus reducing seasonal demands. A slight increase in the number of farms since 1930 has not checked declining labor needs. This increase was due to the migration of factory workers to a few acres in the country, in order to lower their living costs. The rapid increase in the use of mechanical equipment on farms since 1925 has reduced the man-hour requirements of most crop production.

A reduction of about 14 percent in the number of farms over the last 35 years, together with a 12 percent increase in their average size, have lowered farm labor needs. The expansion of country estates has created only a slight increase in the demand for labor, while the farm population has greatly exceeded farm employment opportunities.

These facts lead to the conclusion that employment opportunities in agriculture will probably continue to decline despite the fact that federal government soil conservation projects may reduce to a certain extent the increasing loss in soil fertility.

B. Non-Agricultural Employment

The opportunities for Franklin County youth to obtain non-agricultural employment in the county have been relatively good for the past 20 years because shoe factories

have been in operation in four rural communities, and to a lesser extent, because of the expansion of the garment industry in the county. These trends probably will continue but industry in the future may expand less rapidly than in the past; certainly industrial employment will not develop with sufficient rapidity to absorb the available labor supply. Union organization, wage-and-hour laws, and rising living standards, are greatly lessening the attractiveness of Franklin County's rural towns to large urban employers.(1)

C. Unemployment 1930 and 1937

Unemployment was not general in 1930 but it became a serious problem during the subsequent years. In 1937 an estimate indicated that 18 percent of the gainful workers were available for total employment. When the partially unemployed are included, there were 26.2 percent of the gainful workers available for total or partial employment. These comparisons exclude unpaid family workers in agriculture. Registrants at the Employment Office, November 1937, constituted 11.1 percent of the estimated gainful workers.

Proportionately, unemployment for gainful workers was greater for males than for females in 1930, but greater for females than for males by 1937. This is probably due to the increased proportion of women trying to obtain gainful employment in 1937 as contrasted to 1930. Females were greatly under-represented in the active file of the Washington office of the Missouri State Employment Service, as shown by an analysis of November 1937 when they accounted for only 2.7 percent of the applicants actively seeking employment. Young workers, of both sexes, predominated in estimates of the number of totally unemployed and emergency workers based upon the Census of Unemployment, November 1937. Unemployment was greater, proportionately, for colored than for white workers. Unemployment was greatest for workers in unskilled and semi-

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(1) On November 25, 1938, the National Labor Relations Board issued a decision ordering the Hamilton-Brown Shoe Company of St. Louis (now Collins-Morris Company) to reinstate 187 workers with back pay dating from May and June 1937, at which time the workers were allegedly discharged for union activities. At the same time it was announced that the factory at Poplar Bluff, Missouri, was to be closed because of labor difficulties.

skilled occupations, and for "new" workers.

D. Estimates of Migration

Lack of employment opportunities in relation to the labor supply has resulted in emigration from the county. Approximately 103 native whites, 10 to 19 years of age were leaving each year from 1920 to 1930. Of these 50 were males and 53, females.

In an agricultural area of declining productivity, young girls of large families see less opportunity for employment than do farm boys. Migration was therefore, greater for females than for males. This is reflected, by the fact that in 1930 there were 106.4 males to every 100 females in the population of Franklin County which was in contrast to the City of St. Louis, where there were 95.6 males to every 100 females. Sex ratio figures show successive waves of female migrants from farms to rural towns, to urban places, and to the City of St. Louis.

1. The Influence of Social Factors. The migration of rural youth from Franklin County was a result not only of economic forces, but also of changing social attitudes. It is generally agreed that increased secondary education has been a stimulant to migration in a situation where the supply of labor exceeded the demand. Increased education broadened the horizon of rural youth. It increased their information of types and places of employment, created new fields of interest and acquainted them with ways and means of seeking what appeared to be greater employment opportunities. Migration was facilitated by the availability of such typical urban institutions as the movies and improved roads, with the cheapening of the automobile. One local observer stated the revolutionary effects of improved transportation as follows:

> "Thirty years ago, surplus farm youth would never have thought of looking for a job in St. Louis, as they do now. They did not know about jobs, and they could not get there easily, if they did know. Today, when a rumor gets around that jobs are opening up at a particular plant they are at the factory in 45 minutes. And their wives with them."

A noticeable social development has been the disregard for "sacrifice living" of past generations. Emphasis

now is placed on urban standards of living. The rural youth of Franklin County today will no longer deny themselves a variety of social contacts which were deemed unnecessary by their parents. They desire cash incomes which will enable them to provide themselves with the ordinary comforts of life enjoyed by residents of towns and cities. The so-called "compensating features" of farm life, such as an abundance of fresh air and sunshine, ample supply of good, fresh, food for immediate table use and canning purposes, closeness to nature, and management of one's own affairs, all of these may be very much worth while but appear to be of little interest to youth if the modern comforts of home life are denied them. The entrance of an increasing number of women into gainful employment reflects their desire to raise present living standards. A large percentage of the women working in the shoe factories of the county are married.

Although costs of living are said to be "not much if any lower" in the rural towns than in the City of St. Louis workers who obtained employment in the shoe factories expressed satisfaction with rural town life.

2. The Influence of the Schools. The number of persons 7 to 20 years of age remained fairly constant between 1920 and 1930. This reflects the growth of the factory towns, for the school population in the rural districts has declined somewhat along with the total rural population. In 1920 the total school population was 8,314 and in 1930, 8,351.

The proportion of the school population attending public schools increased from 59.2 percent in 1930 to 63.0 percent in 1937. This general increase was the result of a larger proportionate enrollment in the high schools because the attendance of rural district schools declined during the period. This tendancy for increasing proportions of the youth of school age to attend high school may have operated to increase migration as discussed elsewhere in these Conclusions.

Franklin County has fewer of its youth between 14 and 18 attending school than any other county in the state, except one. This is traceable probably to two factors: (1) The lack of interest in secondary education which is characteristic of a large sector of the farm population; (2) Proximity to the St. Louis Industrial Area, which has afforded relatively greater employment opportunities.

The curricula of the rural schools, especially the secondary schools, reflects the desire of the youth to educate themselves for non-agricultural types of employment. Courses in mechanical trades are popular with boys. Courses

in business, bookkeeping, accounting, letter writing, etc., are popular with both boys and girls. The educational curricula, undoubtedly, tends to educate farm youth away from the farm rather than the reverse. In the light of employment opportunities in the past, this cannot be condemned. Revolutionary improvements of roads, and the cheapness of the automobile, have provided an avenue of escape from what was considered an environment of few opportunities. All four-year high schools are located in towns of the county. A greater percentage of the enrollment in the high schools comprises students from the towns and not from the farms.

3. The Influence of Federal Government Expenditures. The federal government expenditures since 1933, have tended to check migration in that they have given some degree of security to marginal urban and farm families. Soil conservation projects have absorbed a large number of farm youth. The latter regard this type of employment as satisfactory, in contrast to work on the farm as a day laborer.

4. Probable Future Migration. Because of the lack of local data, it is extremely difficult to arrive at an estimate of the probable future relationship between population in the county and economic opportunities. However, it seems reasonable to conclude from field study, that Franklin County will continue to have a surplus population and that the Industrial Area of St. Louis will probably continue to offer relatively greater economic opportunities to many of its rural youth than could Franklin County.

V. RECOMMENDATIONS

Franklin County youth need information about jobs. They appreciate realistic counseling but resent preaching. The Employment Service can meet this need of youth but the fulfillment of its obligation will require careful planning of an extended program. The suggestions which follow are designed to point out some of the essentials of the plan.

Counseling regarding job opportunities and requirements should begin early, perhaps in the seventh grade, and continue until the youth has made a satisfactory vocational adjustment. In very few cases are the schools in a position to continue counseling from the time a pupil enters the seventh grade until he secures employment. Seldom does the student go directly from school to job. And from the time he leaves school until he makes an adequate vocational adjustment, he should be provided with realistic counseling facilities. These facilities should be available to him at the local employment office. Counseling should begin in the schools because many of these rural young people who are most in need of information are reluctant to visit the employment office because they lack exact information regarding its facilities. To overcome this handicap it is suggested that an Employment Service field representative visit the schools at least once each year as a new group of students reaches the seventh grade to establish contact with them, to inform them of the facilities available at their local office, and to encourage them to start thinking about their vocational problems. Through the cooperation of the schools students who plan to leave to go to work and who are interested in securing information about specific job opportunities could be organized into groups for discussion. Individual problems of the members of the group could be discussed by appointment at the employment office. In this way the youth may see a realistic picture of job opportunities and be encouraged to formulate his own decision regarding the choice of a vocation.

To carry out this plan the Employment Service would require specific information concerning at least three factors: The individual youth, job opportunities, and economic trends.

To secure information about the individual it is suggested that a cooperative arrangement be worked out between the public and parochial schools and the Employment Service so that cumulative records could be prepared in the schools and be made available to the Service. These cumulative records should include the scores or grades secured by

the student on general aptitude and achievement tests. In addition to these academic measures, teachers' appraisals, and school grades, certain vocational aptitude tests could be administered to the students in groups at the school or individually at the employment office. Definite procedures for test administration would need to be worked out in the light of our present knowledge of the validity of available tests and in consideration of the practical features of cost, personnel, etc.

The Employment Service may secure information about jobs from descriptions published by the United States Employment Service, and from monographs of selected industries in the St. Louis Area prepared by this community survey center. (A bibliography of the material follows this section). Nothing however, would take the place of detailed first-hand knowledge of jobs in the local community and in the larger industrial area. The employment service personnel should consider the study of job descriptions as a starting point from which to acquire precise information about jobs in the local community. Plant visits will have much more meaning to the interviewer who has prepared himself for them by a study of the appropriate job descriptions. Through these sources knowledge may be obtained of the operations performed on a variety of jobs and the qualifications demanded of the worker for successful accomplishment of the tasks.

In addition to facts about the individual and facts about the job, Employment Service personnel would need to possess information about economic trends in individual industries of the local community and in the wider area in order to describe realistically the employment opportunities available to Franklin County youth. A knowledge of the demand for and supply of labor in the local market and in the St. Louis Industrial Area would permit the employment office representative to describe to the youth current opportunities in his community and in the nearby area. Local industries which are expanding and those which are declining could be enumerated and surpluses and shortages of labor could be pointed out. The prevailing hours, wages, and working conditions for each job should be described and the seasonality of employment, technological changes impending, and the relative security of employment should be made known to youth. The St. Louis Community Survey Center is undertaking several industry studies designed to provide this information for counselors and for the youth themselves.

On the basis of these facts, minimum standards of achievement for various jobs could be set up for youth who wish to migrate to St. Louis. Those who failed to meet these standards should be encouraged to secure additional training

or advised to seek other employment, the nature of which would be determined by personal data and available opportunities. Those youth who are able to meet employers hiring requirements should be instructed in the techniques of getting and holding a job. This instruction should include such topics as appearance; care of the hair, face, hands, clothing, shoes; what to say and how to say it during the interview; preparation of letters of application; etc. In the case of girls who will apply for stenographic positions instructions of this nature are particularly important because few employers consider current youth fashions in dress and other details of appearance to be fitting for the office. For those migrating, arrangements could be worked out between the local employment office and the office in St. Louis so that the cumulative records would be available to the St. Louis placement personnel for those youth who wished employment there.

The suggestions outlined here must be tentative because some of them cannot be carried out within the limits of our present knowledge. However, an early beginning should be made by the Employment Service and the schools to pool all data now available concerning individuals, jobs, and opportunities. In that way a foundation may be set upon which both organizations may build a future structure which will increase their usefulness to their community.

JOB INFORMATION

Published by

THE UNITED STATES EMPLOYMENT SERVICE(1)

Occupational Titles and Codes for Use in Public Employment Offices, Volume 1, Group Arrangement; Employment Office Manual Series, Section B, 124 pp., 1936, 50 cents.

Occupational Titles and Codes for Use in Public Employment Offices, Volume 2, Alphabetic Arrangement; Employment Office Manual Series, Section C, 116 pp., 1936, 75 cents.

Job Specifications for the Automobile-manufacturing Industry, June 1935, 3 volumes, total cost $2.50, sold only in sets.

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(1) May be obtained only by purchase from the Superintendent of Documents, Government Printing Office, Washington, D. C., at prices indicated. Stamps are not acceptable in payment.

Job Specifications for the Cotton Textile Industry, June 1935, 1 volume, 254 pp., $1.00.

Job Descriptions for the Construction Industry, July 1936, 5 volumes, total cost $5.25, sold only in sets.

Job Descriptions for the Laundry Industry, June 1937, 1 volume, 291 pp., $1.25.

Job Descriptions for Hotels and Restaurants, April 1938, 2 volumes, total cost $2.00, sold only in sets.

Job Descriptions for Job Foundries, April 1938, 1 volume, 166 pp., $1.25.

Job Descriptions for Job Machine Shops, April 1938, 1 volume, 196 pp., 75 cents.

Job Descriptions for the Retail Trade, April 1938, 3 volumes, total cost $3.00, sold only in sets.

Job Descriptions for the Cleaning, Dyeing, and Pressing Industry, October 1938, 1 volume, 344 pp., $1.00.

Industrial Classifications and Codes for Use in Public Employment Offices, July 1938, 78 pp., 35 cents.

NATIONAL JOB DESCRIPTIONS IN PROCESS
UNITED STATES EMPLOYMENT SERVICE

The United States Employment Service has in process national job descriptions for the following industries:

Slaughtering and Meat Packing

Baking

Garment Manufacturing

Confectionery

Lumber and Woodworking

Hat and Cap Manufacturing

Canning and Preserving

INDUSTRY MONOGRAPHS IN PROCESS

St. Louis Community Survey Center

The St. Louis Community Survey Center has in process job monographs for the following local industries:

Job Foundries

Slaughtering and Meat Packing

Hotels

Restaurants, Eating and Drinking Places

Aircraft Manufacturing

Hat and Cap Manufacturing

APPENDIX

Explanatory Notes

1. - Methods and Sources Used in Estimating Migration, Franklin County, Missouri, 1910 to 1920 and 1920 to 1930.

2. - Methods and Sources Used for Estimating Change in Population, Franklin County, Missouri, 1930 to 1937.

3. - Methods and Sources Used in Estimating Changes in the Number of Gainful Workers, Franklin County, Missouri, 1930 to 1937.

4. - Methods and Sources Used to Estimate Unemployment and Partial Unemployment, Franklin County, Missouri, 1937.

5. - Methods and Sources Used in Estimating Unemployment by Color, Franklin County, Missouri, 1937.

1. - METHODS AND SOURCES USED IN ESTIMATING MIGRATION, FRANKLIN COUNTY, MISSOURI, 1910 TO 1920 AND 1920 TO 1930

United States data by age group and sex, for 1910, 1920 and 1930, were obtained from the Fifteenth Census of the United States, 1930, Population, Vol. II., pp. 578 to 580. Franklin County data by age group and sex for 1910, 1920 and 1930, were obtained from the United States Bureau of the Census.

The steps in the procedure were as follows:

1. The percentage change for native whites in related age groups, 1910 to 1920 for the United States was calculated. (See Columns 2, 5, and 7 in tables 39 and 40) The age group 0 to 4 in 1910 was 10 to 14 by 1920, 5 to 9 was 15 to 19 by 1920, etc.

2. The percentage change for native whites in selected age groups 1910 to 1920 for Franklin County was calculated. (See Columns 3, 6, and 9 in tables 39 and 40)

3. The percentage change for the United States native white population was assumed to be what might be expected in the county 1910 to 1920 if there were no migration. The difference between the United States and the county figures was assumed to be the percentage difference due to migration. (See Column 9 in tables 39 and 40)

4. The percent increase or decrease due to migration was multiplied by the number in each age group at the beginning of the decade; the result was the number emigrating. (See Column 10 in tables 39 and 40)

5. The same steps were followed for the decade 1920 to 1930.

The data from tables 39 and 40 have been summarized in table 41 for the decade 1910 to 1920 and in table 42 for the years 1920 to 1930. Table 41 shows that from 1910 to 1920 for both sexes, age 0 to 9 in 1910, the loss resulting from migration was 728 persons of whom 297 were males and 431, females. By 1920 this group had become 10 to 19 years of age. Table 42 shows that during the 10 years from 1920 to 1930, 1,030 persons 10 to 19 years of age in 1920 had emigrated from Franklin County by 1930. Of these, 496 were males and 534, females.

In the age group 0 to 9 in 1920 immigration, rather than emigration, was taking place during the ensuing decade. The computations indicate that there was a gain in numbers in this age group of 201 persons, 184 males and 17 females. (See tables 39 and 40) The explanation for this increase is to be found in the fact that there were expanding opportunities in manufactures which caused wage earners with families to move into the county. Another explanation of this increase would involve the well-known census phenomenon of the under enumeration of children in the youngest age groups. However, since the United States totals are the base against which certain of its parts are being measured, it seems safe to assume that whatever under enumeration occurs in the United States totals, occurs to a like degree in each state and county. Thus the relative changes among the age groups are assumed to be unaffected by under or over enumeration in any census year. Therefore, industrial expansion remains as the chief reason for the increase in population for the age group 0 to 9 in 1920 during the decade ending in 1930. This expansion is shown by the increase in the number of wage earners in manufactures from 1,172 in 1919 to 2,530 in 1929.(1) Associated with this increase in the number of wage earners in manufactures there would probably be also an increase in the number of employees in service industries, trade, and professional service. Certainly, not all of this increase was the result of immigration of new residents. Many of the wage earners in manufactures were recruited from the farm and nonfarm population of the county, but data are lacking upon which to base precise estimates of the extent to which this movement took place. That it was a factor of importance is suggested by the decline in "other rural population" from 19,691 in 1920 to 16,175 in 1930.(2) It will be noted from tables 41 and 42 that for age group 0 to 9 in 1910 which became 10 to 19 in 1920 and 20 to 29 in 1930 that the net change resulting from emigration and immigration was a loss of 1,758 persons, 793 males and 965 females, so that in spite of expanding industrial opportunities within the county over 26 percent of those under 10 in 1910 had emigrated by 1930. The tendency for a larger proportion of females to migrate is found in national studies of this problem.(3)

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(1) Data for 1919 from the Fourteenth Census of the United States, Manufactures, p. 777, and for 1929 from the Fifteenth Census of the United States, Manufactures, Vol. III, p. 286.

(2) Table 5.

(3) The Problems of a Changing Population, National Resources Committee, May 1938.

TABLE 39. - ESTIMATES OF MIGRATION FOR NATIVE WHITE MALE POPULATION BY AGE GROUP, 1910 TO 1920 AND 1920 TO 1930, FRANKLIN COUNTY, MISSOURI

1910			1920						
Age group	Number		Age group	Number		Percent loss or gain from 1910		Difference in percent change (Col. 8 minus Col. 7)	Estimated migration (product Cols. 9 and 3)
	United States	Franklin County		United States	Franklin County	United States	Franklin County		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
			0- 4	5,237,857	1,407				
			5- 9	5,013,431	1,497				
0- 4	4,676,710	1,689	10-14	4,567,998	1,538	-2.3245	- 8.9402	- 6.6157	-112
5- 9	4,134,714	1,689	15-19	3,882,561	1,401	-6.0984	-17.0515	-10.9531	-185

1930						
Age group	Number		Percent loss or gain from 1920		Difference in percent change (Col. 15 minus Col. 14)	Estimated migration (product Cols. 16 and 6)
	United States	Franklin County	United States	Franklin County		
(11)	(12)	(13)	(14)	(15)	(16)	(17)
10-14	5,265,795	1,531	+0.5334	+ 8.8131	+ 8.2797	(1)+116
15-19	4,907,316	1,533	-2.1166	+ 2.4048	+ 4.5214	(1)+ 68
20-24	4,346,913	1,226	-4.8399	-20.2861	-15.4462	-238
25-29	3,731,794	1,089	-3.8832	-22.2698	-18.3866	-258

(1) These figures represent increases in population, the reverse of migration out of the county.

TABLE 40. - ESTIMATES OF MIGRATION FOR NATIVE WHITE FEMALE POPULATION BY AGE GROUP, 1910 TO 1920 AND 1920 TO 1930, FRANKLIN COUNTY, MISSOURI

1910			1920						
Age group	Number		Age group	Number		Percent loss or gain from 1910		Difference in percent change (Col. 8 minus Col. 7)	Estimated migration (product Cols. 9 and 3)
	United States	Franklin County		United States	Franklin County	United States	Franklin County		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
			0- 4	5,091,080	1,430				
			5- 9	4,903,930	1,451				
0- 4	4,543,697	1,661	10-14	4,469,962	1,504	-1.6227	- 9.4521	- 7.8294	-130
5- 9	4,041,950	1,618	15-19	3,903,652	1,262	-3.4216	-22.0025	-18.5809	-301

1930						
Age group	Number		Percent loss or gain from 1920		Difference in percent change (Col. 15 minus Col. 14)	Estimated migration (product Cols. 16 and 6)
	United States	Franklin County	United States	Franklin County		
(11)	(12)	(13)	(14)	(15)	(16)	(17)
10-14	5,132,751	1,446	+ .8185	+ 1.1189	+ 0.3004	(1) + 4
15-19	4,879,638	1,431	- .4954	- 1.3784	- 0.8830	- 13
20-24	4,457,250	1,202	- .2844	-20.0798	-19.7954	- 298
25-29	3,820,896	999	-2.1200	-20.8399	-18.7199	- 236

(1) This figure represents an increase in population, the reverse of migration out of the county.

TABLE 41. - ESTIMATES OF MIGRATION FOR NATIVE WHITE POPULATION BY SEX AND AGE GROUP, FRANKLIN COUNTY, MISSOURI, 1910 TO 1920

Sex	Population 0 to 9 in 1910	Population 10 to 19 in 1920	Loss 1910 to 1920		Estimated loss due to migration	
			Number	Percent	Number	Percent
Total	6,657	5,705	952	14.3	728	10.9
Male	3,378	2,939	439	13.0	297	8.8
Female	3,279	2,766	513	15.6	431	13.1

TABLE 42. - ESTIMATES OF MIGRATION FOR NATIVE WHITE POPULATION BY SEX AND AGE GROUP, FRANKLIN COUNTY, MISSOURI, 1920 TO 1930

Sex	Population 10 to 19 in 1920	Population 20 to 29 in 1930	Loss 1920 to 1930		Estimated loss due to migration	
			Number	Percent	Number	Percent
Total	5,705	4,516	1,189	20.8	1,030	18.1
Male	2,939	2,315	624	21.2	496	16.9
Female	2,766	2,201	565	20.4	534	19.3

NOTE 2. - METHODS AND SOURCES USED FOR ESTIMATING CHANGES IN POPULATION, FRANKLIN COUNTY, MISSOURI, 1930 TO 1937

Column 2, table 43 shows the distribution of females 15 to 54 by the age groups indicated in Column 1. Column 3 contains the birth rate per 1,000 females at those ages as determined by the National Resources Committee.(4) The population over 35 in Franklin County was distributed by 10-year intervals, therefore, it was necessary to average five-year time interval birth rates to approximate the birth rates for the 10-year age group.

For the age group 45 to 54, the birth rate for the age group 45 to 49 was used because five-year time interval birth rates were not given beyond age 49. No adjustment was made in this group because children are born occasionally to women past 50 and because the rate was so low that it would have no appreciable affect upon the population.

Column 6 shows the five-year time interval death rates for the native white male population of the United States from 1930 to 1934.(4) As in the case of birth rates it was necessary to average the death rates for two five-year time intervals to secure an approximation of the death rate for a 10-year group. For the death rate for the male population 75 and over, an average of the death rates for the five-year time intervals from 75 to 94 was obtained.

Column 7 presents the estimated deaths occurring in the male population of Franklin County from 1930 to 1934.

It should be noted that the number of children under five was multiplied by the correction factor 1.05 to allow for under enumeration of children of those ages and that birth rates and death rates are shown per 1,000 persons.

The estimated deaths for females in Franklin County 1930 to 1934, as shown in Column 10, were secured in the same way as those for males.

Table 44 shows the estimated change in population in Franklin County from 1930 to 1937. The estimated number of births was distributed in accordance with that of the United States native white population under one year of age as enumerated in the Fifteenth Census of the United States.

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(4) Population Statistics, 1, National Data, National Resources Committee, October 1937.

This ratio was approximately 51 percent males and 49 percent females. To secure the estimated births and deaths from 1930 to 1937, the trends of the birth rates and death rates for the period April 1, 1930 to December 31, 1934 were projected forward into 1937 by dividing the number of births and deaths by 4.75 and multiplying by 7. This procedure may be subject to some error because of the tendency of birth rates and death rates to decline. However, these ratios are somewhat compensating in their influence upon the population and it is reasonable to suppose that this procedure will present a reasonable approximation to the facts. Were there no migration into, or emigration from Franklin County, changes in the number of births and deaths would precisely correspond to changes in the population. However, our examination of available statistics indicates that there has been a loss in population in this county from 1920 to 1930 as a result of emigration of individuals in certain age groups where data were available. These age groups represent only a part of the total emigration. By projection of the 1920 to 1930 trend of migration to 1937 we find a net change in the population of Franklin County to be an increase of 183 persons during the period April 1, 1930 to December 31, 1937. This continuation of the trend of migration from 1920 to 1930 through the depression years to 1937 may be questioned because studies of the National Resources Committee indicate that there was an increase of farm population from 1930 to 1935.(5) "There was a general slowing down in the interchanging of population between farms and towns along with the change in net effect from decreases to increases in farm population"(5). Our field studies indicate that there was a slowing down in the migration from Franklin County during 1932 and 1933 but that immigration proceeded at a faster rate subsequent to 1935 as the result of a release of influences that had been dammed up during the depths of the depression.

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(5) The Problems of a Changing Population, National Resources Committee, May 1938, Chapter III, Section 5.

TABLE 43. - FIVE-YEAR AGE PERIOD, FIVE-YEAR TIME INTERVAL BIRTH RATES AND DEATH RATES UNITED STATES, 1930 TO 1934, APPLIED TO FRANKLIN COUNTY, MISSOURI(1)

Age group	Female 1930	Birth rate 1930 to 1934	Estimated births 1930 to 1934	Male 1930	Death rate 1930 to 1934	Estimated deaths 1930 to 1934	Female 1930	Death rate 1930 to 1934	Estimated deaths 1930 to 1934
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
All ages			2,284	15,736		1,017	15,783		750
Under 5(2)				1,395	16.2	24	1,399	13.6	20
5 to 9	---	---	---	1,522	7.6	12	1,491	6.2	9
10 to 14	---	---	---	1,564	9.3	15	1,470	6.6	10
15 to 19	1,460	65.1	95	1,571	12.9	20	1,460	11.1	16
20 to 24	1,226	432.1	530	1,253	15.7	20	1,226	13.9	17
25 to 29	1,024	592.7	607	1,119	18.4	21	1,024	16.5	17
30 to 34	936	509.5	477	1,011	23.1	23	936	19.3	18
35 to 44	1,868	264.2	494	1,893	34.6	65	1,868	27.0	50
45 to 54	1,633	49.9	81	1,739	66.8	116	1,633	49.8	81
55 to 64	---	---	---	1,367	138.7	190	1,217	108.2	132
65 to 74	---	---	---	944	292.2	276	756	248.5	188
75 and over	---	---	---	356	661.1	235	302	635.4	192
Unknown	---	---	---	2	---	---	1	---	---

(1) Population Statistics, National Data, National Resources Committee, October 1937. Birth rates and death rates are shown per 1,000 persons.

(2) Increased by 1.05 to allow for under enumeration, see Problems of a Changing Population, National Resources Committee, May 1938, p. 127n.

TABLE 44. - ESTIMATED CHANGE IN POPULATION, FRANKLIN COUNTY, MISSOURI, 1930 TO 1937

Estimated births, April 1, 1930 to December 31, 1934		2,284
Male (51%, estimated from United States ratio of native white males to females under 1 year(1))	1,165	
Female (estimated as for male)	1,119	
Estimated deaths, April 1, 1930 to December 31, 1934		1,767
Male	1,017	
Female	750	
Estimated Births, 1930 to 1937 $(\frac{2284}{4.75} \times 7)$(2)		3,367
Male $(\frac{1165}{4.75} \times 7)$	1,715	
Female $(\frac{1119}{4.75} \times 7)$	1,652	
Estimated deaths, 1930 to 1937 $(\frac{1767}{4.75} \times 7)$		2,604
Male $(\frac{1017}{4.75} \times 7)$	1,498	
Female $(\frac{750}{4.75} \times 7)$	1,106	
Estimated increase resulting from excess of births over deaths, 1930 to 1937		763
Male	217	
Female	546	
Estimated loss resulting from migration for age groups for which data are available, 1930 to 1937		580
Male	218	
Female	362	
Estimated net change in population		+ 183
Male	- 1	
Female	+ 184	

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(1) Fifteenth Census of the United States, 1930, Population, Vol. II, p. 578.

(2) The Fifteenth Census was taken April 1, 1930.

3. - METHODS AND SOURCES USED IN ESTIMATING CHANGES IN THE NUMBER OF GAINFUL WORKERS, FRANKLIN COUNTY, MISSOURI, 1930 TO 1937

From the estimate of the population in 1937 we may estimate the number of gainful workers in Franklin County for that year, on the basis of the ratio which existed between gainful workers and population in 1930. This procedure gives us a figure of 11,505 for the total number of gainful workers to be expected. However, changing employment conditions bring about corresponding fluctuations in the proportion of the persons available for employment. The Census of Partial Employment, Unemployment, and Occupations, 1937, states that the number of unemployed increases more rapidly than the number of jobs lost. This is particularly true in the case of female workers. They become available for employment because the husband or head of the household has lost his job. Recently, additional females have come into the labor market because mechanization has made its appearance to assist the housewife in domestic duties and has provided her with the opportunity to seek employment outside the home.

Statistics to throw light upon this problem are not available for Franklin County, but approximations may be reached by the application of trends secured from national figures. The enumerative check, conducted as part of the Unemployment Census of 1937, shows the number of gainful workers for the United States who usually work for pay or profit to be 40,115,000 males, and 14,388,000 females. The number of gainful workers who usually work for pay or profit to be expected in 1937 in accordance with the 1930 ratio of gainful workers to population was 39,717,000 males and 11,155,000 females. The net difference between these figures, after necessary adjustments have been made, as shown in table 45, was a loss of 88,000 males and a gain of 2,828,000 females. These net differences were converted to percentages and applied to the gainful worker figures for Franklin County with the result that the revised estimate indicated a figure of 12,173 for the total gainful workers in Franklin County, 1937. This does not include unpaid family workers in agriculture.

TABLE 45. - ESTIMATED CHANGE IN NUMBER OF GAINFUL WORKERS, FRANKLIN COUNTY, MISSOURI, 1930 TO 1937

Item	Total	Male	Female
Population, 1930	30,519	15,736	14,783
Gainful workers, 1930 (less unpaid family workers in agriculture)	11,569	9,395	2,174
Estimated population, 1937	30,702	15,735	14,967
Gainful workers, 1930 as percentage of the population, 1930	---	59.7	14.7
Ratio of gainful workers to population, 1930, applied to estimated population, 1937, to secure estimated gainful workers 1937	11,594	9,394	2,200
Number of gainful workers who usually work for pay or profit, from the enumerative check, United States, 1937(1)	54,503,000	40,115,000	14,388,000
Number of gainful workers who usually work for pay or profit expected in 1937 by adjusting the 1930 gainful workers for changes in population, April 1930 to November 1937	50,872,000	39,717,000	11,155,000
Difference	3,631,000	398,000	3,233,000
Less: Persons who usually work but not actively seeking employment(1)	- 891,000	- 486,000	- 405,000
Net difference between estimated number of gainful workers from the enumerative check and the number expected by adjusting the 1930 gainful worker figures for population changes(1)	2,740,000	- 88,000	+2,828,000
Net difference expressed as percentage of number of gainful workers expected in 1937	----	- 0.22	+ 25.35
Net difference percentages applied to estimated gainful workers to secure revised estimated number of gainful workers, Franklin County, 1937	12,173	9,415	2,758

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(1) Census of Partial Employment, Unemployment, and Occupations, 1937, Vol. IV, p. 112.

4. - METHODS AND SOURCES USED TO ESTIMATE UNEMPLOYMENT AND PARTIAL UNEMPLOYMENT, FRANKLIN COUNTY, MISSOURI, 1937

Data from the Census of Partial Employment, Unemployment, and Occupations, 1937, show by sex the number of registrants totally unemployed, partially unemployed, and those working on the emergency program in Franklin County, 1937. The enumerative check, indicates the percentage of completeness of enumeration by geographical divisions, by color, sex and age groups. Assuming that conditions for the West North Central States, obtained in Franklin County we may apply these percentages to the actual registration figures to obtain an estimate of the true amount of unemployment (See table 46).

The percentages of completion by unemployment class and sex for the West North Central States were first applied to the totals of males and females for Franklin County. Each sex was taken separately because of the differences in the proportions of each in the unemployment classes and because of the difference in the percentages of completion for each sex. No allowance for color was made because the proportion of Negroes in Franklin County, 3.4 percent in 1930 agreed very closely with that for the West North Central States, 2.5 percent. The estimated numbers for each sex were taken together to secure the estimated totals for each unemployment class. In computing the estimated number in each unemployment class by sex and age group, the totals for each sex previously secured for each unemployment class were assumed to represent a closer approximation to the totals for all ages than would the sum of the estimates for each age group, because the sampling errors for a particular age group would be much greater than those for all age groups combined (See table 47).

TABLE 46. - ESTIMATES OF UNEMPLOYMENT AND PARTIAL UNEMPLOYMENT, FRANKLIN COUNTY, MISSOURI, 1937

Item	Total	Male	Female
Totally unemployed(1)	1,227	951	276
Percent complete(2)	---	72.4	48.6
Emergency workers(1)	294	270	24
Percent complete(2)	---	97.3	77.4
Partly unemployed(1)	690	618	72
Percent complete(2)	---	76.4	38.7
Estimates of the number in each unemployment class secured by applying percentages of completion to the number of respondents			
Totally unemployed	1,882	1,314	568
Emergency workers	308	277	31
Partly unemployed	995	809	186
Estimated number of totally unemployed and emergency workers as a percentage of revised estimated number of gainful workers, 1937	17.99	16.90	21.72
Estimated number of totally unemployed, emergency workers, and partially unemployed as a percentage of revised estimated gainful workers, 1937	26.16	25.49	28.46

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(1) Census of Partial Employment, Unemployment, and Occupations, 1937, Vol. II, p. 439.

(2) Census of Partial Employment, Unemployment, and Occupations, 1937, Vol. IV, pp. 117 to 120. Data for West North Central registrants applied to Franklin County.

TABLE 47. - REGISTRANTS AND ESTIMATED NUMBER IN EACH UNEMPLOYMENT CLASS BY AGE GROUP AND SEX, FRANKLIN COUNTY, MISSOURI, 1937(1)

Unemployment class and age group	Franklin County				West North Central States	
	Male		Female		Percent complete	
	Registrants	Estimated number	Registrants	Estimated number	Male	Female
Totally unemployed						
Total	951	1,314	276	568	72.4	48.6
15 to 19	108	243	61	151	43.8	40.0
20 to 24	148	223	52	118	65.0	43.5
25 to 34	210	271	66	140	76.1	46.4
35 to 44	167	208	41	69	78.9	59.4
45 to 54	127	143	31	51	87.9	60.6
55 to 64	126	149	18	32	84.2	57.0
65 to 74	60	72	4	4	83.3	--
Not reported	5	5	3	3	--	--
Emergency workers						(2)
Total	270	277	24	31	97.3	77.4
15 to 19	57	60	4	8	91.8	56.1
20 to 24	35	37	3	4	93.5	80.8
25 to 34	40	44	4	5	91.2	81.5
35 to 44	54	51	3	3	103.9	93.0
45 to 54	49	51	5	6	95.1	90.8
55 to 64	26	25	5	5	104.5	107.8
65 to 74	8	8	-	-	--	--
Not reported	1	1	-	-	--	--
Partly unemployed						
Total	618	809	72	186	76.4	38.7
15 to 19	59	129	18	49	43.8	35.3
20 to 24	76	123	11	27	58.7	39.5
25 to 34	130	170	14	45	73.8	30.6
35 to 44	122	139	11	29	83.9	37.2
45 to 54	124	133	11	26	88.9	40.3
55 to 64	76	81	6	9	93.9	66.7
65 to 74	29	32	-	-	91.4	--
Not reported	2	2	1	1	--	--

(1) Census of Partial Employment, Unemployment, and Occupations, 1937. Data for Franklin County, Missouri, Vol. II, p. 439. Percentages of completeness of registration, Vol. IV, pp. 117 to 120.

(2) United States data used for ages 20 to 74.

5. - METHODS AND SOURCES USED IN ESTIMATING UNEMPLOYMENT BY COLOR, FRANKLIN COUNTY, MISSOURI, 1937

Table 48 shows the number and proportion of persons 10 years old and over, who were gainfully occupied, by color and nativity for the State of Missouri in 1930.

Of the total population, 48.9 percent were gainfully occupied, of the Negro population 60.9 percent, and of the native and foreign-born white population, 48.0 percent.

Table 49 shows that in Franklin County 48.7 percent of the population 10 years old and over were gainful workers. This figure agrees very closely with that for the state as a whole. Assuming that the same influences are at work in Franklin County as for the State of Missouri with regard to the Negro population, the proportion of Negro gainful workers to the total Negro population 10 years old and over for the state may be applied to Franklin County to approximate the number of Negro gainful workers. This gives a figure of 275. Subtracting this from the total, leaves a remainder of 11,771 white gainful workers, or 48.5 percent of the white population 10 years old and over.

From table 45 the estimated number of gainful workers in 1937 is 12,173, less unpaid family workers in agriculture. In 1930 the estimated number of Negro gainful workers was 275 or 2.28 percent of all gainful workers. Assuming the proportion of Negro gainful workers has not changed to any extent between 1930 and 1937 and that the inclusion of unpaid family workers in agriculture would not materially affect the relationship, this percentage may be applied to the estimated number of gainful workers in 1937 to approximate the number of Negro gainful workers. Following this procedure, the estimated number of Negro gainful workers in 1937 is 278.

From table 46 we obtain estimates of 2,190 for the number of totally unemployed and emergency workers, 1937. The Census of Unemployment, 1937, Volume IV, pp. 117 to 120, gives the percentage of completeness of enumeration by color for the West North Central States. For Negroes these percentages are as follows: For the totally unemployed, 74.6; and for the emergency workers, 92.7. These percentages were applied to the Negro registrants in these categories and tabulated in table 50, indicating the estimated number of Negro totally unemployed and emergency workers to be 78. This leaves a remainder of 2,112 for whites. These figures when related to the estimated number of gainful workers for 1937 show that 28.1 percent of the Negro gainful workers were unemployed or at work on the emergency works program in 1937 and that 17.8 percent of the whites were also in that group.

TABLE 48. - NUMBER AND PROPORTION OF PERSONS 10 YEARS OLD AND OVER GAINFULLY OCCUPIED, BY COLOR AND NATIVITY FOR THE STATE OF MISSOURI, 1930

Missouri	Population 10 years old and over	Gainfully occupied	
		Number	Percent
Total	2,984,368	1,457,968	48.9
Native white	2,642,357	1,260,602	47.7
Foreign-born white	148,460	79,608	53.6
Negro	188,664	114,825	60.9
Other	4,887	2,933	60.0

TABLE 49. - NUMBER AND PROPORTION OF PERSONS 10 YEARS OLD AND OVER GAINFULLY OCCUPIED BY COLOR, 1930, AND ESTIMATES FOR 1937 OF GAINFUL WORKERS, COMPARED WITH UNEMPLOYED AND EMERGENCY WORKERS, FRANKLIN COUNTY, MISSOURI(1)

Color	1930			1937 Estimates		
	Population 10 years old and over	Gainful workers		Gainful workers	Unemployed and emergency workers	
		Number	Percent of population		Number	Percent of gainful workers
Total	24,712	(2)12,046	48.7	12,173	2,190	18.0
White	24,260	(3)11,771	48.5	11,895	2,112	17.8
Negro	451	(3) 275	60.9	278	78	28.1

(1) Fifteenth Census of the United States, 1930, Population, Vol. III, p. 1330.

(2) Ibid, p. 1364.

(3) Estimated.

TABLE 50. - ESTIMATES OF THE NUMBER OF UNEMPLOYED AND EMERGENCY WORKERS BY COLOR, FRANKLIN COUNTY, MISSOURI, 1937(1)

Color	Totally unemployed			Emergency workers		
	Registrants	Per-cent complete	Estimated number	Registrants	Per-cent complete	Estimated number
Total	--	--	1,882	--	--	308
White	--	--	1,815	--	--	297
Negro	50	74.6	67	10	92.7	11

(1) Census of Partial Employment, Unemployment, and Occupations, 1937, Vol. IV, pp. 117 to 120.